

# CSR Report 2006



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Bjørn Albinus, President and CEO

# CSR Report 2006

Cheminova's mission is to control unwanted insects, plants and fungi in order to secure adequate food and fibre production and to improve the living conditions of the world's population.

We believe that most people with a good knowledge of Cheminova perceive the company as a competent global player which performs its activities with a considerable sense of responsibility - a concern that is reflected in all the company's activities. The debate in the Danish media over Cheminova's sale of hazardous chemicals has demonstrated, however, that there are opinion leaders as well as other citizens in Denmark who unfortunately do not share that perception. We believe that the primary reason is lack of information from Cheminova regarding its operations.

We would like to change this. We have come to realise that operating a company in a responsible manner is not enough in itself - you also need to inform the world about it and describe the dilemmas that are associated with running a global business. The world is facing a number of challenges, and Cheminova contributes to solving several of them. In Denmark, we do not suffer from starvation or diseases such as malaria - and this makes it difficult for people to understand that, elsewhere, it may be necessary to resort to extreme measures in order to ensure food on the table. We are aware that our shareholders and some stakeholders are interested in these matters. We have therefore decided to publish an annual report on our efforts. Some people refer to this as non-financial values, others call them environmental and social responsibilities, and others talk about Corporate Social Responsibility, or CSR.

We have chosen to adopt the latter acronym and, in this, our first CSR report, our communication efforts will devote particular attention to three topics - the use and phase-out of the most toxic pesticides in Third World countries, environmental aspects in relation to Cheminova's production facilities in India and Denmark, and supplier management. We have divided the report into four main sections: global challenges, product stewardship, product manufacture and supplier management.

CSR reporting is a continuous process. Next year, additional data will have been procured which is suitable for publication in the report, and new topics will be discussed. As part of our CSR efforts, we will be intensifying the work on developing and improving the company's management systems.

We would like to receive criticism and comments on the report and would welcome input for our future reporting.

Bjørn Albinus President and CEO Cheminova A/S

# **Management statement**

On April 2, the Board of Executives and the vice presidents considered and adopted the CSR report for 2006 for Cheminova A/S.

The reporting is based on the corporate mission of the company. Based on the interest expressed by our stakeholders, we have elected to devote attention to four topics this year: global challenges, product stewardship, product manufacture and supplier management.

In addition to follow-up on the 2006 targets and more detailed information on products and the environment, the report for 2007 will consider other topics such as development and innovation, human resources and occupational health and safety.

The report for 2006 will be published on the Cheminova website www.cheminova.dk in Danish on April 12, 2007.

In the opinion of the Board of Executives and the vice presidents, the CSR report for 2006 gives a true and fair view of the situation and the company's CSR efforts in the areas selected for the reporting for year.

Harboøre, April 2, 2007



Bjørn Albinus President and CEO



Kurt Pedersen Kaalund Executive Vice President



Jesper Kirkeby Hansen Vice President, Sales and Marketing



Niels Morten Hjort
Vice President, Operations



Allan Skov Vice President, Development



Søren Vedel Vice President, Finance and Support

# CSR targets for 2007:

# General CSR management

- Publication of CSR Report 2006.
- Communication of code of business principles to all companies and employees.
- Ensuring the successful operation of the CSR secretariat.
- Procedure for handling deviations (violation of the code of business principles).

# **Product stewardship**

- Implementing activities in connection with the phase-out of class I products as described (this comprises communication of correct use, precise labelling, choice of appropriate packaging materials and the introduction of less toxic alternatives).
- Preparing and implementing stewardship guidelines based on FAO's code of conduct in the group's sales organisation.
- Preparing internal guidelines concerning the labelling of Cheminova's sales products.
- Preparing a policy on the acquisition of registration data based on vertebrate studies.

#### **Production**

#### India:

- Establishment of a new incineration plant for chemical waste.
- Establishment of natural gas-fired captive power plant.
- Contributing to optimising waste-water treatment at the joint waste-water treatment plant for the industrial enterprises in the area.
- Reduction of the number of accidents at work and unintended incidents.

### Denmark:

- Use of waste hydrogen for energy purposes.
- Environmental certification of the company in accordance with ISO 14001.
- Occupational health and safety certification of the company in accordance with OHSAS 18001.
- Reduction of the number of accidents at work and unintended incidents.

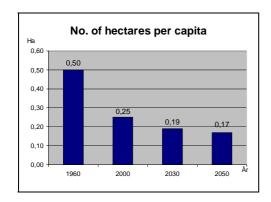
#### **Supplier management**

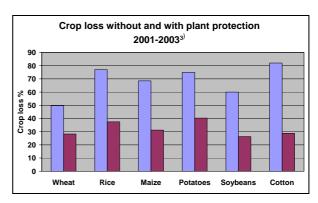
- Communicating Cheminova's supplier code of conduct to all present and future production material suppliers and having them confirm that they comply with its principles.
- Conducting a number of audit visits to suppliers.
- Training employees with purchasing responsibilities within the area of supplier management.

# Global challenges, Cheminova and CSR

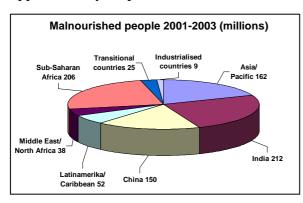
# Global challenges

In 2000, the world population topped six billion, and in 2050 there will be approximately nine billion people on earth - three times as many as in 1960. Feeding the world's population will therefore be a major global challenge. This challenge does not diminish given that it is hardly likely that more farmland can be put under the plough without destroying valuable natural areas and endangering biodiversity. It is estimated that the area available per capita in 2030 will have dropped to about 0.19 ha from about 0.25 ha today. Only efficient agricultural production with optimum utilisation of all modern methods can ensure the yield increases required. The problem will become even more pronounced as large areas are expected to be redistributed from food production to the production of ethanol for biofuel. In the EU alone, the aim is for biofuels to cover 5.75 per cent of the transport sector's energy consumption in 2010<sup>1</sup>. As the first goal in its development plan "UN Millennium Development Goals", the UN plans to eradicate extreme poverty and hunger (link: www.un.org/millenniumgoals).





Insects, plant diseases and weeds still cause very significant yield losses within all major crops. In 1994, it was estimated that the improved yield by using plant protection corresponds to approximately 48 per cent of the value of the agricultural crops.<sup>2)</sup>



In its report "The State of Food Insecurity in the World 2006", FAO estimated that more than 800,000,000 people in the developing countries alone are malnourished.

<sup>&</sup>lt;sup>1)</sup> Transport accounts for almost 30 per cent of the CO<sub>2</sub> emissions in Europe, and the share is constantly rising. More and more people acknowledge that it is not possible to do anything about CO<sub>2</sub> emissions without changing the transport sector's dependence on oil. The EU realised this a long time ago and has therefore set the target that biofuels must cover 5.75 per cent of the transport sector's energy consumption in 2010 (Source: Dansk BioEnergi no. 85, page 8).

<sup>&</sup>lt;sup>2)</sup> Source: E-C. Oerke et al (1994): Crop Production and Crop Protection. Estimated Losses in Major Food and Cash Crops.

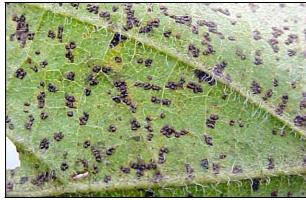
<sup>&</sup>lt;sup>3)</sup> Source: Oerke (2006): Journal of Agricultural Science 144, 31-43.





Boll weevil.

Locusts.





Soybean rust.

Yellow fever mosquito.

Another global challenge is posed by diseases transmitted by insects (e.g. malaria, dengue, yellow fever, plague etc.), which are rampant in large parts of the world. In the fight against these diseases, the use of insecticides such as malathion is crucial. Cheminova is the only company that markets a malathion product which complies with FAO's specifications.

As many as 107 countries and territories were risk areas for malaria in 2004. Some 3.2 billion of the world's population lived in areas in which there was a risk of contracting malaria.

It is estimated that 350-500 million clinical cases of malaria occur each year due to transmission of malaria parasites via mosquitoes. Malaria causes more than one million deaths each year. The disease indirectly contributes to many additional deaths, mainly among small children in conjunction with other infections and diseases.

The transmission patterns for malaria vary significantly between regions and even within individual countries. The differences stem from variations among malaria parasites and disease-carrying insects, different ecological conditions and socioeconomic factors, such as poverty, and access to effective healthcare and prevention.

Around 60 per cent of the malaria cases in the world and more than 80 per cent of the malaria deaths occur in Sub-Saharan Africa.

#### Cheminova

These global challenges create the market demand that Cheminova is trying to satisfy. This is the justification for the existence of the company – which is expressed as follows in the company's mission:

Cheminova's mission is to control unwanted insects, plants and fungi in order to secure adequate food and fibre production and to improve the living conditions of the world's population.

Cheminova's primary business areas are the development, production and sale of plant protection products. The company is not active within gene technology, but manufactures and markets plant protection products for use in GMO crops.

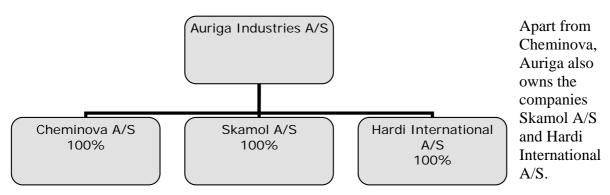


It is Cheminova's objective to be the leading innovative global supplier of generic products within the agrochemical industry. The creation of value is achieved through optimisation and development of the company's five key competences: To identify, develop, register, manufacture and market known plant protection products better than any other company in the industry.

Key competences.

#### Ownership and organisation

Cheminova is a public limited company owned by Auriga Industries A/S. Auriga is quoted on the Copenhagen Stock Exchange with the Aarhus University Research Foundation as the largest shareholder. The foundation owns all class A shares, approximately 40 per cent of the share capital and holds approximately 84 per cent of the voting rights. The foundation makes large contributions to Danish research within a broad range of scientific subject areas (link: www.au.dk/en/tilknyt/auff/).





The Cheminova Group.

Cheminova has 1,592 employees. Of these, 815 are employed on Rønland in Denmark and 777 in subsidiaries and representative offices abroad.

Through subsidiaries and representative offices, Cheminova is represented in 19 countries.

Cheminova in key figures					
DKKm	2006	2005	2004	2003	2002
Revenue	4,032	4,017	4,094	3,420	3,226
EBITDA	184	629	839	527	541
EBIT	18	458	646	336	346
Profit before tax	(71)	369	607	251	238
Tax	69	107	204	109	91
Research and development	131	127	122	134	147
Staff costs	486	448	425	427	436
Number of employees (avg.)	1,608	1,534	1,505	1,541	1,580

#### **Background to the CSR reporting**

Cheminova has always endeavoured to conduct itself responsibly and comply with "FAO's International Code of Conduct". In 1995, the company committed itself to "responsible care". Cheminova is responsive to its stakeholders. Based on a public debate in 2006 over a number of environmental issues relating to Cheminova's business activities, it was decided to start CSR reporting. The decision comes as a natural next step following the measures that Cheminova has previously implemented.

Over the past ten years, Cheminova has undergone a strong internationalisation process which has meant that the company has developed from previously being a production company in Denmark, manufacturing active ingredients and chemical intermediates sold for further processing, to now also having production facilities in India and direct contact to the customers/end-users via its own subsidiaries and representative offices. Cheminova's sales are

increasingly handled via its own subsidiaries. In 1996, the company had subsidiaries in seven countries, representing 47 per cent of plant protection product sales, whereas 84 per cent of sales were handled by 16 subsidiaries in 2006.

Such internationalisation naturally poses a broad range of challenges for Cheminova in relation to mission, objectives and values. Cheminova wants to ensure that the way in which the company is operated is in full compliance with international conventions, local legislation and the management philosophy and values which are promoted in the entire group. Cheminova therefore now takes the opportunity, in connection with the first CSR reporting, to summarise previously formulated policies and guidelines in the code of business principles set out below. The Board of Executives adopted the code at a meeting on February 27, 2007.

# Code of business principles

Cheminova's code of business principles describes the company norms to which all the company's employees conform no matter where in the world they are. The code supports our approach to governance and corporate responsibility.

### **Standard of conduct**

Cheminova conducts its operations with professionalism and openness and with respect for the human rights and the interests of its employees.

# Legislative compliance

Cheminova's companies and employees are required to comply with the laws and regulations of the countries in which they operate.

#### Management

All the Cheminova group's companies are independently managed. It is the responsibility of Cheminova's Board of Executives to ensure that each company is managed in accordance with the group's code of business principles.

#### **Employees**

Cheminova is committed to a working environment based on mutual trust and respect in which everyone takes responsibility for the performance and reputation of the company. Cheminova recruits, employs and promotes employees solely on the basis of the qualifications and skills required for the work to be performed. The company is committed to safe and healthy working conditions for all employees. The company does not use involuntary labour, forced labour or child labour. Cheminova respects the dignity of the individual and the employees' right to freedom of association. The company endeavours to ensure good communication and good working relations.

#### **Customers, distribution and consumers**

Cheminova continuously strives to comply with FAO's code of conduct and the principles of responsible care in relation to the distribution and use of pesticides. It is furthermore ensured that each Cheminova company is a member of a local/regional industrial organisation which, among other things, is involved in product stewardship. In addition, all Cheminova companies have product stewardship as an integrated part of their marketing programmes and, moreover, participate together with other stakeholders in risk-limiting activities.

#### Shareholders

Cheminova operates in accordance with internationally accepted principles of good corporate governance. The company will submit timely, regular and reliable information to shareholders on activities, organisational structure, the financial situation and performance.

# **Suppliers**

Cheminova will ensure a mutually beneficial relationship with suppliers and will formalise the expectations of the suppliers in a separate code.

#### Other business relations and partners (joint ventures)

It is important to Cheminova that its business relations and partners comply with ethical standards, and the company will endeavour to ensure such compliance both when entering into agreements and in the ongoing cooperation.

#### The environment

Environmental impacts are an important factor in connection with the manufacture and sale of chemicals. Responsible behaviour in this area is highly important to Cheminova, which entails that the company strives for continuous improvements in the area.

# Competition

Cheminova believes in free competition and fully endorses the OECD's guidelines for competition.

# **Business integrity**

Cheminova does not, directly or indirectly, receive or offer bribes or other improper advantages in order to achieve business or financial gain. Any demand for or offer of a bribe must be rejected immediately and reported to the management. Employees must not offer, give or receive gifts to a value exceeding locally acceptable triviality limits.

#### **Conflicts of interest**

All Cheminova employees are expected to avoid personal activities or financial interests that could conflict with their responsibilities towards the company. Cheminova employees must not attempt to gain benefits for themselves or others through misuse of their position.

This code of business principles has been inspired by "The OECD Guidelines for Multinational Enterprises" (www.oecd.com).

Any violation of the code must be reported in accordance with the procedures specified by the CSR secretariat. The Board of Executives will not criticise the management for any business loss occurring as a result of compliance with these principles or other mandatory policies and instructions. The Board of Executives expects employees to report any violation or suspected violation of these principles to the Board of Executives. Measures will be taken to ensure that employees can submit such reports in confidentiality and that such reports will not have any negative consequences for the employee.

# <u>Compliance - monitoring</u> - reporting

Compliance with these principles is an important condition for commercial success. Cheminova's Board of Executives is responsible for ensuring compliance with the principles. The responsibility for implementing and driving the planned CSR activities is allocated to the

individual company management teams that are responsible for implementing both activities and principles, if necessary by means of more detailed guidelines adapted to local needs.

Through reporting procedures, compliance with the code and the launched CSR activities are subject to the Board of Executives' evaluation.

# CSR responsibility and organisation

For the handling of CSR-related activities, a CSR secretariat has been established, which reports directly to Cheminova A/S's Board of Executives. The daily manager of the secretariat is the manager of the department for environment, safety and quality. In addition, the functions market development and agronomy, human resources as well as information are also attached to the secretariat. The Board of Executives determines the focus and onus of the CSR work – including the involvement of the company's stakeholders.

The responsibility for implementing and driving the planned CSR activities is allocated to the individual company management teams. Cheminova's Board of Executives must ensure follow-up/reporting of the activities in the first quarter and ensure that budgeting of the planned activities takes place at the budget meetings in the fourth quarter each year.

### Progress and auditing

In future, Cheminova will report externally on the company's CSR activities and has, in this connection, decided on having these activities audited. The aim is to commence auditing already in 2008. Monitoring of the progress of the planned CSR activities will be handled by the CSR secretariat and the Board of Executives.

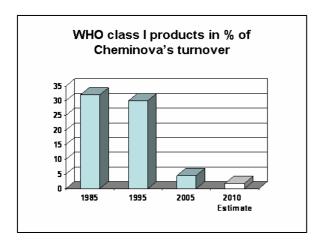
# Targets for 2007:

- Publication of CSR Report 2006.
- Communication of code of business principles to all companies and employees.
- Ensuring the successful operation of the CSR secretariat.
- Procedure for handling deviations (violation of the code of business principles).

# **Product stewardship**

### **Background**

Cheminova has undergone significant developments since the 1990s. From being a primarily production-oriented company where most of the sales consisted of active ingredients and chemical intermediates to other companies in the plant protection industry, the company has adopted a far more market-oriented strategy. Cheminova's product portfolio comprises an increasing number of finished products sold under its own brands. The product range has been expanded over time to include herbicides and fungicides and third-party products so that Cheminova has developed from having its main business focus on insecticides to now offering products for the control of insects, fungi and weeds, in more or less the same proportions as the world market.



The increased presence in the most important markets has meant that Cheminova feels increasingly responsible for contributing to reducing the risk involved in using the products. The most toxic products (WHO class I) obviously require considerable attention to safety, which is why this report focuses on these products. Cheminova's sales of these products have declined drastically over the past years and accounted for approximately 5 per cent of revenue in 2006. The decline is expected to continue in the coming years.

# **Regulation of plant protection products**

Plant protection products and the active ingredients that they contain are subject to regulation similarly to pharmaceutical products. This means that sales permits are based on a registration procedure in which the effect of the substance as well as its toxicological and environmental properties form the basis of the risk assessment. The products are thus approved on a scientific basis.

### National/regional approvals

All sovereign states (and the EU) have legislation stipulating the requirements that must be met in order for a plant protection product to be approved for marketing for a specific purpose. The approvals are reviewed at regular intervals, typically resulting in renewed data requirements.

All Cheminova's products are approved according to the applicable rules in the countries in which they are marketed. There are considerable similarities between the type of data required, but there are great differences in the scope and quality of the investigations required in order to obtain approvals in the individual countries.

The USA, Canada, the EU and Japan have the most demanding requirements for documentation and base the approval of plant protection products on the strictest risk assessments.

### International conventions

Plant protection products are subject to international conventions that concern both plant protection products and chemicals in general. One of the most important conventions is Prior

Informed Consent: The export/import of plant protection products is subject to the Prior Informed Consent (PIC) programme of the Rotterdam convention. This convention sets rules ensuring that the most toxic products are only exported following the written consent of the receiving country before export can take place. The PIC convention has been ratified by more than 50 countries, and the programme has legal force in the EU. This means that methyl parathion and all products based on this active ingredient can only be exported subject to compliance with the following procedure: for each consignment of methyl parathion that Cheminova is to export to, for example, Brazil, the Danish Environmental Protection Agency must be informed in advance. Subsequently, the Danish Environmental Protection Agency contacts the relevant authorities in Brazil with a view to obtaining consent. Once this has been obtained, the Danish Environmental Protection Agency informs Cheminova that the export can take place.

Methyl parathion is the only substance from Cheminova's production in Denmark covered by the PIC convention, while monocrotophos is the only substance from Cheminova's production in India covered by the convention. There were no exports of monocrotophos from Cheminova's factory in India in 2006.

# Voluntary agreements

The "International Code of Conduct on the Distribution and Use of Pesticides" published by FAO in a revised edition in 2002 (in the following referred to as FAO's Code of Conduct) is a voluntary agreement between FAO and the plant protection industry (link: www.fao.org/ag/magazine/mso35C.pdf).

The objective of FAO's Code of Conduct is to establish voluntary standards of conduct for all public and private entities engaged in or associated with the distribution and use of plant protection products. FAO's Code of Conduct is particularly relevant in a context in which the national legislation on plant protection is inadequate. FAO's Code of Conduct contains provisions on, for example, testing of plant protection products, reducing health and environmental risks, regulatory and technical requirements, availability and use, distribution and trade, information exchange, labelling, packaging, storage and disposal, advertising as well as monitoring and observance of the code.

Appointed by FAO and WHO, the Codex Alimentarius Commission defines recommended Maximum Residue Levels (MRLs) of plant protection products in food for the UN's member countries. The recommended MRLs are particularly important for countries with little capacity to develop these on their own. MRL is determined on the basis of documentation submitted by member countries and companies. Cheminova supports Codex Alimentarius by submitting documentation on its own initiative and upon request.

### Own attitudes and business practices

Apart from national legislation, international conventions and voluntary agreements, Cheminova has - through its own business practices - demonstrated its attitudes, for example, in its choice of partners.

- Cheminova has chosen to limit its sales of methyl parathion in its most toxic form (class I)
  to eight countries even though the product is registered in more than thirty countries.
  Monocrotophos is only sold in India.
- Cheminova has chosen to cooperate internationally under the auspices of FAO/WHO on the development of new, up-to-date product specifications on plant protection products.
- Cheminova's attitude towards ethical and scientific requirements for human testing is described in the fact box below. The purpose of the testing, which is conducted solely in

industrialised countries, is to procure documentation for approval purposes. No testing was conducted in 2006, and there are no plans at present to conduct such testing.

• Cheminova's attitude towards animal testing is covered below.

# **Human testing**

Cheminova's attitude in relation to ethical and scientific requirements for experiments involving the administration of pesticides to human subjects.

- The experiments are carried out according to internationally recognised ethical and scientific guidelines (Declaration of Helsinki, ICH Guidelines for Good Clinical Practice, www.wma.net/e/policy/b3.htm and www.emea.eu.int/pdfs/human/ich/013595en.pdf).
- The experiments are made at recognised contract laboratories with documented experience of conducting clinical testing in accordance with the guidelines mentioned above.

While it is the responsibility of the *contract laboratory* to comply with all the formal requirements adopted in the international conventions, it is *Cheminova's* responsibility to ensure that the test protocol reflects the following:

- The administered dose is harmless/low i.e. far under the dosage that is presumed to be able to cause any measurable harmful effect.
- That Cheminova never conducts testing on children, pregnant women or other potentially, particularly sensitive groups.
- That the testing may only be conducted if there is sufficient information available on the test material (e.g. from animal testing) to allow for a sound test plan.

### **Laboratory testing on vertebrates**

# The authorities require animal testing

In order to obtain the authorities' approval of plant protection products, extensive documentation is required on the impact on the environment and the risks of harmful effects on animals and humans. The documentation presupposes in-depth toxicological testing on vertebrates (birds, fish and mammals). The scope of the test results is on a par with what is required for pharmaceutical products. The authorities define in detail the extent and to which guidelines the testing is to be conducted and reported.

Without full compliance with the rules and directions set out by the authorities, it is not possible to obtain the sales permits required to market plant protection products.

With the stricter legislation in the EU on chemicals (REACH), an increasing need for animal testing is anticipated as chemicals will become subject to far more extensive documentation requirements in relation to toxicity and adverse effects than previously.

# Animal testing is a dilemma

On the one hand, the authorities require test results from animal testing as documentation for the toxicity of pharmaceutical products and plant protection products. On the other hand, animal welfare and animal-ethical principles are assigned considerable weight in civilised behaviour. It is not possible to just replace all animal testing with alternative methods based on cell cultures or similar. This serves to illustrate the dilemma that society is facing.

All western countries have legislation on the use of laboratory animals. The Danish Act on Animal Experiments (*Dyreforsøgsloven*), for example, regulates the conditions under which testing on vertebrates shall be conducted.

#### International cooperation between industry and the authorities

At the end of 2005, "The European Partnership for Alternative Approaches to Animal Testing" was established as a partnership between the EU Commission and seven industrial trade organisations, including the European Crop Protection Association (ECPA (link: www.ecpa.be)), of which Cheminova is a member, and the European Chemical Industry Council (CEFIC), of which Cheminova is a member via the Confederation of Danish Industries (DI) (ec.europa.eu/enterprise/epaa/index\_en.htm).

The purpose of this partnership is to promote the so-called "3 Rs" concept, aimed at "Refining, Reducing and Replacing animal use" in testing for approval purposes of chemical products such as medicines, household chemicals and plant protection products.

In connection with the forthcoming revision of the Plant Protection Products Directive (91/414/EEC) in the EU and the implementation of REACH, the possibility of reducing the number of animal tests for approval purposes is being debated. The method under consideration is to give new registration applicants the right - via payments to data holders – to quote existing vertebrate testing data.

# Cheminova's policy in the area

### 1. Approval of plant protection products

As long as the authorities require documentation of animal testing in connection with the approval procedure for plant protection products, Cheminova will obtain such documentation according to the guidelines set out by the authorities.

Cheminova's animal testing is conducted solely by recognised laboratories which have been approved for conducting animal testing by the authorities in the countries in which the work is performed.

Cheminova endeavours to the widest extent possible to buy access to existing test data rather than repeating the same tests. A policy will be prepared for this area.

### 2. Development activities

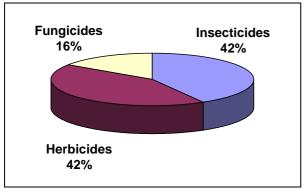
Development activities taking place prior to the marketing of new products or new uses of existing products may require animal testing.

As recommended in Article 5 of FAO's Code of Conduct, Cheminova performs development activities with a view to manufacturing sales products with reduced toxicity.

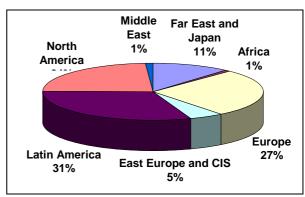
In this context, Cheminova needs to use limited testing to check whether the products have the desired properties. Animal testing is used - but on a small scale - and of the same type as the testing required later on for approval purposes.

#### Cheminova's sales 2006

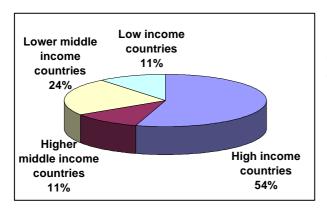
The pie charts below breakdown Cheminova sales into product types, geographical areas and wealth of countries where sold.



Sales broken down by product types.



Sales broken down by geographical areas.



Sales broken down by rich and poor countries (breakdown according to the World Bank's categories of gross national income per capita: low income USD 875 or less p.a.; lower middle income USD 876-3,465 p.a.; higher middle income USD 3,466-10,725 p.a.; and high income USD 10,726 USD or more p.a.).

# Sales of the most toxic products

The most toxic sales products are those which, according to WHO's classification (The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification 2004) fall into class I (A "extremely hazardous" and B "highly hazardous").

The sales specification shown in the table below concerns the sale of class I finished products as well as the supply of active ingredients used to manufacture class I finished products.

Overview of class I products sold by Cheminova in 2006			
Country	Class I products 2006		
Australia	Methyl parathion EC		
USA	Methyl parathion EC		
Mexico	Methyl parathion EC		
	Methamidophos EC		
	Methomyl SP		
Brazil	Methyl parathion EC		
	Methamidophos SL		
Colombia	Methyl parathion EC		
	Monocrotophos SL		
	Methamidophos EC		
	Carbofuran SC		

Taiwan	Methyl parathion EC
Cuba	Methyl parathion EC
Uruguay*	Methyl parathion powder
Argentina	Methamidophos EC
Italy	DDVP EC
India	Monocrotophos SL
	DDVP EC
	Phorate Granulate

<sup>\*</sup> Sales of active ingredient for the manufacture of class II powder

 $EC = Emulsion\ Concentrate;\ SP = Soluble\ Powder;\ SL = Soluble\ Liquid;\ SC = Suspension\ Concentrate.$ 

In 2006, Cheminova acquired a majority stake in the Colombian company CropTech, which has class I products of third-party origin in its portfolio, which are not manufactured by Cheminova. These products are being phased out by the end of 2010 at the latest, in line with Cheminova's other class I products.

### **Product stewardship**

It is, of course, a fundamental aspect of Cheminova's stewardship of plant protection products that the company complies with national legislation in all countries in which Cheminova's products are sold. Cheminova only markets products for which permission (product registration) has been obtained in accordance with the local rules. This means that the necessary documentation has been submitted to the authorities and that the experiments and testing required by the authorities have been carried out.

The second fundamental element is FAO's Code of Conduct, which has been prepared in cooperation between the industry and FAO. FAO's Code of Conduct is directed particularly at countries in which the local rules on approval and use of plant protection products as well as the enforcement of legislation and rules are not yet fully developed. The code sets standards for reducing the risk involved in handling pesticides with a view to avoiding accidents and poisoning. Here, the plant protection industry is particularly responsible for working towards ensuring - in cooperation with the authorities - that the products are stored, transported and used without unacceptable risk to people and the environment. Economically and developmentally weak countries in which the level of education varies significantly pose a large challenge in relation to ensuring the responsible use of plant protection products. The task of reaching an acceptable risk level for the users is the responsibility of the local authorities, the individual farmers and the product suppliers and can therefore, for obvious reasons, not be solved by any one company. However, Cheminova has decided to make targeted efforts to reduce the risk involved in connection with the use of the company's products.



Video-on-wheels training van.



Training in the safe use of pesticides.





Training in the safe use of pesticides in the field.

Pictograms and toxicity (colour) on the label.

In accordance with FAO's Code of Conduct (*inter alia* with reference to Articles 3, 5, 7 and 10), Cheminova has chosen to focus in particular on stewardship activities with the most toxic products that, according to WHO's classification system, belong to class Ia and Ib. The areas in which Cheminova has chosen to focus its efforts are: Communication of information on the correct use and handling of the products, precise and informative labelling, development and marketing of less toxic formulations, use of appropriate packaging materials and phase-out of class I products in a number of countries. Via local trade organisations and in cooperation with the authorities, Cheminova participates in a number of activities designed to reduce the risk that plant protection products pose to people and the environment as recommended in FAO's Code of Conduct.

In the course of 2007, the company's general guidelines on product stewardship will be formally incorporated in all Cheminova subsidiaries.

#### **Phase-out of class I products**

Following a dialogue with shareholders, Cheminova has chosen to provide more detailed information on the ongoing phase-out of class I products in the form of a specified timetable. On November 30, 2006, Cheminova, as the first company in the industry, published a phase-out plan for class I products. The plan contains an overview of all the countries in which class I active ingredients form part of sales products, just as it details which sales products belong to class I. The plan concerns the phase-out of all sales products which, according to WHO's classification, belong to the most toxic category - class I - in the period 2007-2010: The plan relates to all countries outside the USA, Canada, the EU, Australia and Japan where Cheminova sells these products.

The phase-out plan does not include exports or manufacture of class I active ingredients solely used for the manufacture of class II sales products. In 2006, Cheminova's sale of its own class I active ingredients comprised methyl parathion manufactured by Cheminova in Denmark and monocrotophos, DDVP and triazophos manufactured in India.

In addition, the phase-out plan comprises methamidophos, carbofuran, methomyl and phorate, which are not manufactured by Cheminova but handled as third-party sales products. Instead of immediately ceasing the sale of class I products, Cheminova has chosen a phase-out policy that entails maintaining the necessary position in the market while working on the introduction of less toxic alternatives. In order for this to succeed, significant efforts have been launched, comprising the development, testing, approval and marketing of alternative products. An immediate stop, on the other hand, would certainly not lead to a reduction of the risk faced by

the users as Cheminova's sales would immediately be taken over by other suppliers offering the same class I products.

Country	Products based on class I active ingredients 2006	Phase-out year
USA	Methyl parathion EC (class I)	No phase-ou
Mexico	Methyl parathion EC (class I)	200
	Methyl parathion microcapsules (class II)	No phase-ou
	Methomyl SP (class I)	200
	Methamidophos EC (class I)	200
Brazil	Methyl parathion EC (class I)	201
	Methyl parathion microcapsules (class II)	No phase-ou
	Methamidophos SL (class I)	200
Colombia	Methyl parathion EC (class I)	200
	Monocrotophos SL (class I)	200
	Methamidophos EC (class I)	200
	Carbofuran SC (class I)	200
Russia	Methyl parathion microcapsules (class II)	No phase-ou
Ukraine	Methyl parathion microcapsules (class II)	No phase-ou
Australia	Methyl parathion EC (class I)	No phase-ou
	Methyl parathion microcapsules (class II)	No phase-ou
Taiwan	Methyl parathion EC (class I)	200
	Methyl parathion microcapsules (class II)	No phase-ou
Cuba	Methyl parathion EC (class I)	200
South Africa	Methyl parathion microcapsules (class II)	No phase-ou
Uruguay	Methyl parathion powder (class II)	To be further analyse
	Methyl parathion microcapsules (class II)	No phase-ou
Argentina	Methamidophos EC (class I)	200
Italy	DDVP EC (class I)	No phase-ou
India	Monocrotophos SL (class I)	200
	DDVP EC (class I)	201
	Triazophos EC (class II)	No phase-ou
	Carbofuran granulate (class II)	No phase-ou
	Phorate granulate (class I)	200

The products in italics will be phased out in 2010 at the latest.

 $EC = Emulsion\ Concentrate;\ SP = Soluble\ Powder;\ SL = Soluble\ Liquid;\ SC = Suspension\ Concentrate$ 

# Activities in connection with the phase-out

Communication of information on the correct use of the products will be provided on labels and datasheets. Relevant information on safety issues for users will also be provided at sales meetings and in marketing campaigns. Based on FAO's Code of Conduct, stewardship guidelines will be drawn up for Cheminova's subsidiaries as well as for Cheminova's sales organisation in general.

Country	Activities to be implemented in 2007
Mexico	The active ingredient methyl parathion will be supplied solely to companies that manufacture and sell methyl parathion-based class II products such as low-concentrate powder formulations.  Own sales of class I products based on methyl parathion and methamidophos will not take place in small containers, and sales will be limited to distributors serving professional farmers in the north of the country.  In the course of the year, attempts will be made to identify further initiatives that can contribute to reducing the risk involved in using Cheminova's products. The sale of the third-party product methomyl will be discontinued.  There is a considerable local production of methyl parathion in Mexico, which reduces the impact of Cheminova's initiatives on users.
Brazil	Class I products based on methyl parathion and methamidophos will not be sold in small containers, and the sale will be limited to professional farmers. In states in which irresponsible use of the products is prevalent, the product approvals will be revoked, and the use in these states will be removed from Cheminova's labels. Training in the correct use of the products as well as the reduction of risks from the point of view of occupational health and safety will be intensified in connection with Cheminova's sales campaign.
Colombia	In cooperation with Cheminova's local distributor of methyl parathion, a strategy will be prepared for the introduction of the microcapsule formulation (class II). In 2006, Cheminova acquired a majority stake in the company CropTech, whose product range comprises class I products of third-party origin based on the active ingredients monocrotophos, methamidophos, methyl parathion and carbofuran. These products will be covered by the time horizon set out in Cheminova's general phase-out plan. A detailed plan for the phase-out and stewardship activities will be prepared in cooperation with the minority shareholders.
Taiwan	Cheminova's sale of methyl parathion to local companies will be stopped by the end of the year. Cheminova's subsidiary will take measures to expand the area of use for the microcapsule formulation.
Cuba	Negotiations will be launched with the authorities in Cuba with a view to ensuring that the government purchases only the microcapsule formulation of methyl parathion in the future.
Uruguay	Delivery of methyl parathion active ingredient will only take place for the local manufacture of a low-concentrate powder formulation (class II). The labelling of this powder formulation (which is not sold by Cheminova) will be improved so that the package will be equipped with pictograms in future.
Argentina	The subsidiary will not sell class I products based on methamidophos in small containers, and the sale will be limited to professional farmers.  Training in the correct and occupational health and safety-related responsible use of methamidophos will be intensified during sales activities.

The very extensive work on obtaining approval of a patentable class II solid formulation of monocrotophos continues as planned. The laboratory testing for documentation of the properties of the product as a class II product is expected to be completed in 2007, whereas the field testing for registration purposes is expected to be completed in the first quarter of 2008.

No specific initiatives are planned in relation to the other class I products in 2007. General training efforts, involving, for example, video demonstrations of the correct use of the products, will be increased.

A considerable local production of monocrotophos by Cheminova's competitors reduces the impact of Cheminova's initiatives on users.

### Targets for 2007

- Implementing activities in connection with the phase-out of class I products as described (this comprises communication of correct use, precise labelling, choice of appropriate packaging materials and the introduction of less toxic alternatives).
- Preparing and implementing stewardship guidelines based on FAO's Code of Conduct in Cheminova's sales organisation.
- Preparing internal guidelines concerning the labelling of Cheminova's sales products.
- Preparing a policy on the acquisition of vertebrate registration test data.

# **Production**

The products marketed by the company are manufactured in one of the following ways: at the company's own production facilities, as toll production by an external company or purchased from an external company. The production is carried out in compliance with the company's responsible care policy. The conditions relating to purchased products and toll productions are described in further detail in the section on supplier management.

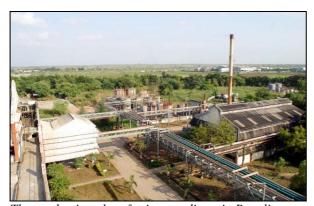
# The company's production

The manufacture of plant protection products takes place via chemical synthesis in purpose-built process plants. It is important that the operation of these plants takes place in due consideration of the surrounding environment and occupational health and safety. Primarily, the external environment is described in this CSR report.

Cheminova owns production facilities where chemical synthesis is carried out in two countries. These are Denmark and India. The facility in India was acquired in 1997. The company in Denmark has 815 permanent employees, 590 of whom are working with production-related tasks. Organisationally, the company is placed under the parent company Cheminova A/S. The company in Denmark has its own specified environmental policy. The company in India has 453 permanent employees, 272 of whom are working with production-related tasks. During the peak season, staff levels are increased by approximately 375 contract employees. Organisationally, the factory is placed under Cheminova's subsidiary in India, which has its own Board of Directors, of which three senior employees from the parent company are members. The parent company inspects the production facilities.

The companies manufacture both intermediates and the active ingredients used in plant protection products. Both companies also manufacture the end-use products - the so-called formulations - which, via the distribution chain, are sold to the farmers.

There is a considerable difference between the local societies in which the companies are located. Cheminova India is located in the Bharuch district near the town of Ankleshwar approximately 320 km north of Mumbai. Ankleshwar and the surrounding area constitute one of the largest industrial areas for small and medium-sized chemical industries in Asia. Most chemical industries are represented here: fertilizers, oil, gas, petrochemistry, pharmaceuticals, agrochemistry, chloralkali, pigment paint, fibres, glass and speciality chemicals. In the Ankleshwar-Panoli area there are 320 companies. Cheminova India is one of the medium-sized companies in the area. Close to the Panoli industrial area, there are two small villages, Sanjali and Kharod.



 ${\it The production plant for intermediates in Panoli.}$ 



The production plant in Denmark.

Cheminova in Denmark is located on the peninsula of Rønland on Harboøre Tange between Limfjorden and the North Sea in the municipality of Lemvig. The company is situated in an area designated for industrial purposes, but is the only company in the area. The closest neighbours, four kilometres away, are the two small urban communities of Harboøre and Thyborøn. The dominant trades in the area are farming and fishing. Cheminova is the largest industrial company in the region.

The primary importance of both companies to the areas in which they are located relates, of course, to the creation of jobs for the people who live in the region. Moreover, modest contributions are made to the local communities in which they are operating. In Denmark, this is primarily done by supporting various associations; in India, the support goes to the two local villages in the form of, for example, contributions to schools and road renovation.

#### **Environment**

Environmental impact is an important factor in connection with chemical production. It has therefore been an area for attention in both Denmark and India. The following describes the environmental aspects of the two companies within the areas of waste water, air and waste. In addition, inspections and control as well as unintended incidents are described. For the production facilities in Denmark, more detailed green accounts are prepared in accordance with Danish legislation.

### Waste water, India



Biological waste-water treatment plant at Cheminova's production facilities for intermediates in Panoli.

In Panoli, production takes places at two different sites in the industrial area located 4 km apart. One site manufactures intermediates and the other technical products, the latter including filling into end-use packaging. Both sites have biological waste-water treatment plants in which all waste water is treated before leaving the company.

When the waste water leaves the company, it is pumped through pipes to a new biological waste-water treatment plant established by the companies in the three industrial areas in Bharuch. The plant receives waste water from 1,200 large and small companies. It was commissioned in August 2006 and is still in the start-up phase. From the plant, the cleaned waste water is pumped through a 54-kilometre-long pipeline into the Gulf of Khambhat, which is connected to the Arabian Sea. The last 9 kilometres of the pipeline extend into the gulf.



The three industrial areas in the Bharuch area and the waste-water pipe line into the Gulf of Khambhat.



Pumping station from the Panoli industrial area to the joint waste-water treatment plant.



Joint biological waste-water treatment plant for the three industrial areas in the Bharuch area.

A major challenge for the entire local community in the Bharuch area is to get all 1,200 companies, large as well as small, connected to the waste-water treatment plant and to ensure at all times that the volume of waste water received by the plant does not exceed capacity. The waste water discharged by the individual companies varies a lot, in terms of both volume and composition, which is illustrated by the photo from a pumping station.

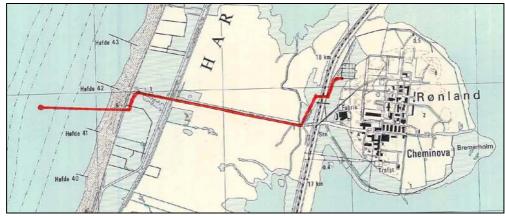
The plant was established and is operated by an industrial partnership - BEAIL (Bharuch Eco Aqua Infrastructure Limited). Further information is available on the company's website: www.beail.org.

#### Waste water, Denmark



Biological waste-water treatment plant at Rønland.

All waste water from the company is treated in a central biological waste-water treatment plant. The cleaned waste water is pumped through a 3-kilometre-long pipeline into the North Sea; the last 600 metres of the pipeline extend into the sea. A revised waste-water permit, which is based on the EU's Water Framework Directive, was granted in 2005. The directive must be implemented in the member states by 2015.



Waste-water pipeline from Cheminova on Rønland into the North Sea.

### Air emissions, India

All air emissions are cleaned in air washers prior to discharge. At the production facilities for intermediates, an air incineration plant has been installed, in which the process air flows are also incinerated and treated in an alkaline air washer prior to discharge into the open air. Two incineration plants have been installed at the production facilities for technical production, one for liquid waste and one for selected process air flows.



Air incineration plant at production facilities for intermediates in Panoli.



Air incineration plant on Rønland.

#### Air emissions, Denmark

Process air is incinerated in a central air incineration plant, and the air is cleaned in a alkaline air washer prior to discharge into the atmosphere.

#### Waste, India

Liquid chemical waste is to a certain extent incinerated in the company's own incineration plant. Liquid waste, which is not incinerated locally, is sent together with other chemical waste for incineration externally. Sludge from the biological waste-water treatment plants as well as ash from the incineration plant for chemical waste are sent to a waste disposal site established and operated by the industrial companies that use it, BEIL (Bharuch Enviro Infrastructure Ltd.). The waste disposal site has been established and is operated according to state-of-the-art

principles with an impermeable membrane liner and leachate collection etc. Ordinary waste is reused to a large extent. After completion of the waste storage, the area must be designated for recreational purposes.



BEIL's waste disposal site - re-established part on the right.



Expanded waste disposal site being established.

# Waste, Denmark



Incineration plant for liquid chemical waste on Rønland.



Deposit on Langøya.

Liquid chemical waste from one of the production facilities is treated at the company's own incineration plant; other liquid and solid chemical waste is sent to the company Kommunekemi for destruction. Sludge from the company's biological waste-water treatment plant is sent to a special waste disposal site owned by the company NOAH in Norway. The waste disposal site in Norway is a former limestone quarry on the island of Langøya which the Norwegian authorities want re-established. The long-term goal is to recreate the original contours of the island so that it can eventually be used for recreational purposes. Further information on the disposal site is available on NOAH's website: www.noah.no. The reason for this solution is that there are no suitable treatment plant or disposal sites in Denmark. Disposal in lime quarries is highly suitable for the waste from Cheminova's plants due to the alkaline environment that the lime causes.

The production facilities in Denmark have been located on Harboøre Tange since 1954. In the early years, production took place under environmental conditions that were very different from today's conditions. This involved the disposal of chemical waste on the company's land and resulted in the contamination of the subsoil. Over the years, major efforts have been made to remedy this situation—waste deposits have been removed and facilities for the pumping-up and purification of groundwater have been established. There are still the remains of a deposit of waste sulphur on the company's land today. The remaining waste sulphur is contaminated with mercury, and it is therefore not possible to treat this deposit today. The disposal site is protected by surrounding sheet piling which meets an

impermeable clay layer underneath the disposal site. The top of the site is sealed with an impermeable membrane. The sheet piling is not entirely waterproof and it is therefore ensured via drains and pumps that the water level inside the deposit is always lower that the surrounding groundwater level. Given the manner in which the disposal site is protected today, it does not affect the surroundings.

# Inspection and control

Inspection is carried out by the approving authorities of both companies. In Panoli, the approving authority is the state authority "Gujarat Pollution Control Board"; on Rønland it was the County of Ringkjøbing until January 1, 2007. In the future, it will be a state environmental office domiciled in Aarhus, Denmark. Emission control in both countries is primarily based on internal control combined with inspections from the approving authority. In accordance with the Indian rules, an annual audit is carried out by an independent institute (Institute of Technology, Bharuch).



An inspector from the County of Ringkøbing makes a visit accompanied by a Cheminova employee.

#### Unintended incidents

Internal registrations of "unintended incidents" are carried out in the company in Denmark as well as in the company in India. Unintended incidents are defined as operational disruptions that entail an impact on the external environment for a short period of time as a consequence of human or technical errors. This type of incident has been registered in Denmark since 2003. In India, registration did not start until 2006. Unintended incidents in 2006 have given rise to one reprimand from the authorities in India and one in Denmark.

### Health and safety

A health and safety concept is in place in both companies, comprising:

- A safety organisation with representatives of the employer and the employees.
- An emergency unit, which is operational around the clock and which can provide quick and efficient assistance in case of accidents such as fire, gas leakage etc. (the unit is trained on an ongoing basis via emergency drills).
- Medical checkups, including regular blood testing of staff groups risking exposure from organophosphates.
- Systematic training of the entire organisation in safe conduct and behaviour during accidents.
- Registration and analysis of accidents involving personal injury.





The occupational health and safety unit in Panoli.

The fire station on Rønland.

The safety and health work in India is based on extensive experience from the Danish company within this field and has today reached a level which is comparable with the conditions in Denmark. Due to the social conditions in India, which are different to social conditions in Denmark, the company in Panoli has entered into a separate agreement with a physician and local hospitals in the vicinity in order to ensure quick and competent treatment of injured employees, if any. Moreover, the company has its own ambulance, so that also the transport can be safe and quick if required.

#### Fact box: Environment, health and safety, 2006

Only data for 2006 have been included in this first reporting year. In the future reports, the historical development will be included based on 2006. More extensive data are available for the production in Denmark in the annually prepared green accounts, including historical data for the past five years.

	Unit	Cheminova A/S	Cheminova India Ltd.
Water consumption:			
Cooling (seawater)	m³	51,046,000	84,923
Processes and ordinary	m³	779,094	196,296
consumption			
Energy consumption:			
Natural gas	MWh	465,564	60,766
Electricity	MWh	78,201	16,897
Diesel/oil	MWh	534	69,635
Discharge of waste water (note 1):			
Soluble salts	Tonnes	42,000	857
COD	Tonnes	181	27
BOD	Tonnes	5	5
Suspended substance	Tonnes	151	86
Nitrogen	Tonnes	20	11
		(total N)	(ammonium-N)
Phosphorus	Tonnes	4	50
Air emissions:			
$SO_2$	Tonnes	259	5
Particles	Tonnes	1	13
$CO_2$	Tonnes	109,660	11,710
NH <sub>3</sub>	Tonnes	-	0.1
HC1	Tonnes	2	1
Ordinary waste:			
Reuse	Tonnes	2,904	499
Incineration	Tonnes	976	-
Deposit	Tonnes	36,450	42
Hazardous waste:			
Reuse	Tonnes	172	2
Incineration	Tonnes	4,970	2,103
Deposit (BEIL)	Tonnes	-	8,276
Unintended incidents (note 2):	No.	37	58
Accidents (note 3):	No.	17 (19)	4
Accident frequency:	Note 4	23.5(26.4)	2.86
Absence due to accidents:	Note 5	2.7 (2.8)	0.81

- Note 1: The discharge data from Cheminova India concern discharge to the joint waste-water system. The BOD and COD reduction in the joint waste-water treatment plant is approximately 80 per cent and approximately 10 per cent, respectively.
- Note 2: Operational disruptions that entail an impact on the external environment for a short period of time as a consequence of human or technical errors.
- Note 3: Definition of accidents: Absence from work for more than two days (figures in brackets concern absence from work for more than one day which is the normal specification in Denmark).
- Note 4: Number of accidents per 1 million man-hours worked.
- Note 5: Number of lost man-hours per 1,000 man-hours worked.

#### **Future focus areas**

#### India

The air quality in the Ankleshwar area is a problem due to the large number of chemical companies in the region. This is therefore a focus area for our Indian company. In Akleshwar and Panoli, only Cheminova and 20 others out of 320 chemical companies have their own incineration plants. With a view to improving air emissions, a new incineration plant for chemical waste will be established within a two-year period to replace one of the existing plants. A dialogue has been initiated with the authorities in order to clarify the emission requirements that such a plant must fulfil in order to comply with expected future air emission requirements for such plants.

In 2007, a natural gas-fired captive power plant will also be established, resulting in optimum energy use as well as reductions in CO<sub>2</sub> emissions.

Concerning waste water, it will be a joint goal for the companies in the Ankleshwar area to get the newly established biological treatment plant to function optimally. A steering group has been attached to the plant, on which Cheminova has a representative.

#### Denmark

An important objective for the company in Rønland has been toget the company certified within the occupational health and safety area in accordance with OHSAS 18001 and within the environmental areas in accordance with ISO 14001. Both certifications were obtained at the beginning of 2007. Hydrogen is a waste product in one of the company's production facilities. A project aimed at utilising the hydrogen for energy purposes will be set up in 2007. The project will lead to energy savings and reduced CO<sub>2</sub> emissions.

A focus area for both the company in Denmark and the one in India is the reduction of the number of accidents at work and the number of unintended incidents.

### **Targets in 2007/2008**

# India:

- Establishment of a new incineration plant for chemical waste.
- Establishment of natural gas-fired captive power plant.
- Contributing to optimising waste-water treatment at the joint waste-water treatment plant for the industrial enterprises in the area.
- Reduction of the number of accidents at work and unintended incidents.

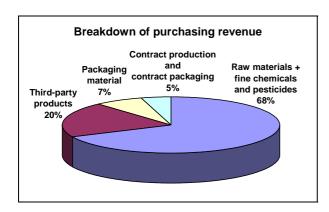
#### Denmark:

- Use of waste hydrogen for energy purposes.
- Certification of the company within the environmental area in accordance with ISO 14001.
- Certification of the company within the occupational health and safety area in accordance with OHSAS 18001.
- Reduction of the number of accidents at work and unintended incidents.

# Supplier management

# Supplier management

In 2006, Cheminova did business with approximately 900 suppliers of production materials (raw materials, fine chemicals, plant protection products and packaging materials). These suppliers include companies, which supply Cheminova with supplementary services for the production in the form of contract production and contract packaging. In 2006, goods were purchased for a total of approximately DKK 2,430 million. In addition, Cheminova receives goods and services such as plant equipment and machinery, assistance from authorities and financial and IT assistance from a wide range of companies.





Approximately two thirds of the company's purchases are made from OECD member countries. The past few years have seen an increase in purchases made from countries that are not members of the OECD, and this trend is expected to continue.







Transport of raw materials on Rønland.

Cheminova's environmental and social responsibility also extends to its suppliers. Various policies have been introduced/drawn up for the purpose of ensuring compliance with legislation and industrial standards on good practices. At the beginning of 2005, Cheminova established a policy for external companies that manufacture and package end-use products under subcontracts. The quality assurance policy was launched in 2006, and the Supplier Code (*Leverandørkodeks for Ansvarlig Adfærd (LAA)*), was formulated at the end of 2006. These policies provide the purchasing organisation with the tools that are needed to assess suppliers, not only with a view to quality and price, but also in relation to environmental and social aspects.

# The Supplier Code comprises the following basic principles:

- 1. There shall be compliance with all applicable laws and regulations of the country where operations are undertaken.
- 2. There shall be no use of forced or compulsory labour, and employees shall be free to leave employment after reasonable notice.
- 3. There shall be no use of child labour.
- 4. There shall be no discrimination in employment related decisions, and no employee suffers harassment, physical or mental punishment, or other form of abuse.
- 5. There shall be respect for the right of employees to collective bargaining.
- 6. Safe and healthy working conditions will be provided for all employees.
- 7. Wages and working hours will, as a minimum, comply with all applicable wage and hour laws, and rules and regulations, including minimum wage, overtime and maximum hours in the country concerned.
- 8. There shall be established emergency procedures to prevent major accidents that can cause harm to health or the environment.
- 9. There shall be no improper advantage sought, including the payment of bribes, to secure delivery to Cheminova A/S.
- 10. Operations will be carried out with care for the environment.

Ensuring that all suppliers comply with the Supplier Code is a complex and time-consuming task. The company is aware that both social standards and cultural differences in some of the countries with which Cheminova does business mean that there are a number of dilemmas that have to be faced.

In 2007, it is the intention initially to introduce the Supplier Code to Cheminova A/S's most important suppliers. In the course of the next few years, the Supplier Code is to be introduced in the entire Cheminova group. This will generally be ensured by having the suppliers acknowledge in writing that they will comply with the Supplier Code. Auditing will be carried out on a sample basis in order to assess whether the supplier possesses the right preconditions for cooperating with Cheminova A/S. If the supplier's preconditions are insufficient, Cheminova A/S will work with the supplier in question to develop their skills for the mutual benefit of both parties. If such cooperation does not lead to satisfactory results, the supplier relationship will be terminated.

Cheminova's employees with purchasing responsibilities will be trained in the aspects of the Supplier Code and the auditing procedures. This will be formalised in the course of 2007.

### Targets for 2007

- Communicating Cheminova's supplier code of conduct to all present and future production material suppliers and having them confirm that they comply with its principles.
- Conducting a number of audit visits to suppliers.
- Training all employees with purchasing responsibilities within the area of supplier management.

# Action plan

Focus areas	Targets	Performance Indicators (KPI)	Success criteria /Progress		
Business principle	Business principles				
CSR reporting	Publishing and distributing the first CSR report.	That CSR Report 2006 is prepared and published by April 15, 2007 at the latest.	That clear global business principles are incorporated in CSR Report 2007.		
Code of business principles	Preparing business principles applying to everyone in the group.	Having communicated the business principles to all employees before the end of 2007.	That all employees in the group are familiar with the business principles before the end of 2007.		
Establishment of CSR secretariat	Ensuring clear division of responsibilities and roles in connection with the CSR activities with a view to driving the activities.	That a CSR secretariat is established in April 2007 and that a clear division of responsibilities for the activities is available.			
Product stewardsh	ip				
	Ensuring risk reduction for class I products during the phase-out period.	That labels, packaging materials, user guides, customer choices and communication activities are reviewed.	That an overview of the area is available and that all promised activities have been launched by the end of 2007.		
	Introducing less toxic alternatives.	That specific project proposals are established in 2007.	That projects have been authorised as at the end of 2007 and that the monocrotophos project in India is progressing according to plan.		
	Ensuring formal implementation of stewardship guidelines in the group's sales organisation.	That guidelines are adopted by August 1, 2007.	That guidelines are implemented in the sales organisation in 2007.		
	Ensuring implementation of internal guidelines on labelling of Cheminova's sales products.	That guidelines are adopted by July 1, 2007.	That guidelines enter into force in 2007.		
	Ensuring implementation of politics for the project organisation concerning the acquisition of registration data based on vertebrate experiments in the EU.	That the politics are adopted by June 1, 2007.	That the politics are implemented in the organisation in 2007.		

Production			
Production, India	Reducing air emissions.	A new incineration plant for chemical waste is established and commissioned in 2008 and performs as intended.	A decision on the establishment of a plant is made. The plant is ordered. The plant is commissioned. Functional requirements are documented.
	Ensuring energy savings and reduced CO <sub>2</sub> emissions.	A natural gas-fired captive power plant is established and commissioned in 2007 and performs as intended.	The plant is commissioned. Functional requirements are documented.
	Improving the operation of the joint waste-water treatment plant.	Optimisation of the operation of the plant is sought.	Improved treatment is documented.
	Reducing the number of accidents at work and unintended incidents.	Specific preventive actions are launched.	The number of accidents at work and unintended incidents are reduced.
Production, Denmark	Ensuring energy savings and reduced CO <sub>2</sub> emissions.	A project for use of waste hydrogen for energy purposes is implemented.	The project is implemented and commissioned. Energy savings and reduced CO <sub>2</sub> emissions are documented.
	Improving the environmental conditions.	Certification of the company in accordance with ISO 14001 is obtained in 2007.	Certification is obtained in 2007.
	Improving the occupational health and safety conditions.	Certification of the company in accordance with OHSAS 18001 is obtained in 2007.	Certification is obtained in 2007.
	Reducing the number of accidents at work and unintended incidents.	Specific preventive actions are launched.	The number of accidents at work and unintended incidents are reduced.
Supplier managem	nent		
Supplier Code	Ensuring that suppliers to Cheminova A/S comply with the Supplier Code.	The Supplier Code is communicated to all present and future production material suppliers.	All suppliers have confirmed compliance with the Supplier Code.
Auditing of suppliers	Ensuring that suppliers comply with the Supplier Code.	A number of audits of selected suppliers are carried out.	Audited suppliers comply with the Supplier Code.
Training	Ensuring that all employees with purchasing responsibilities understand the Supplier Code.	The training is completed before the end of 2007.	All employees with purchasing responsibilities understand the Supplier Code.

# Responsible Care

# A programme of the Association of Danish Chemical Industries

#### 1. Company Policy

The company should develop a policy of environment, safety, and health with future-oriented objectives. This policy should form constituent part of the overall policy and strategy of the company.

The company policy on environment, safety, and health should involve the entire organisation of the company and be taken into account of the planning and implementation of all company activities.

#### 2. Employees' Commitment and Responsibility

The company should keep their employees at all levels well informed on the company policy on environment, safety, and health.

The company should foster commitment and responsibility among its employees and ensure an active employee contribution to fulfil the objectives. The company should promote individual alertness among employees to sources of pollution and issues relevant to safety and health.

The company should establish well-defined responsibilities among its employees and offer regular and adequate training enabling the employees to fulfil their responsibilities.

#### 3. Efficiency

The company should strive at the lowest achievable impact on the surroundings as a whole by:

- minimising the use of raw materials and energy
- minimising the process emissions
- minimising the risk of accidents and limiting the consequences of possible accidents
- minimising the health risk for employees.

New processes should be planned, and existing processes should be adapted and improved with regard to the technical and economic feasibility and the demands of society.

#### 4. Monitoring

The company should monitor at regular intervals process emissions to the working environment and the surrounding environment, preferably by generally approved methods.

The company should register all accidents and incidents and investigate the events and causes with a view to utilising the experience for future prevention. The company monitoring should form the basis of regular documentation of results and improvements achieved for environment, safety, and health. The company should regularly evaluate performance compared to objectives.

#### 5. Product development

In developing new products the company should take into account the total consumption of raw material and energy resources during the production, use, and disposal after use, or of residual products formed during production or use.

#### 6. Communication

The company should co-operate openly with the competent authorities on issues relevant to environment, safety, and health.

The company should provide adequate documentation on such issues to the authorities.

On the basis of the documentation provided by the company to the authorities the company can regularly inform neighbours and other stakeholders in the society on issues of environment, safety, and health.

#### 7. Customers

The company should ensure that customers receive all relevant information on correct processing and use of the company's products including information on disposal of residual products and information of relevance for subsequent processing to the extent possible.

#### 8. Suppliers

The company should encourage suppliers to deliver environmentally sound raw materials and products.

By means of specific requests and instruction the company should ensure that suppliers of equipment and subcontractors are chosen among those who fulfil demands derived from the company policy on environment, safety, and health.

#### 9. Transport

The company should ensure safe and regulatory compliant transport to and from the company by making requests to transporters including relevant training and instruction of drivers and other transport employees.

#### 10. Co-operation

The company should encourage its co-operators to aim at a level for environment, safety, and health protection corresponding to its own level.

# **Glossary**

Active ingredient: Active chemical in its pure or technical form.

*Bio-ethanol:* Alcohol intended for fuel and produced from plants.

**BOD:** Biochemical Oxygen Demand.

*Carbofuran:* Insecticide, primarily used in rice and potatoes in Colombia.

*Chemical synthesis:* Process, where chemical compounds react with each other so that new compounds are generated.

*Class I product:* Product, that according to WHO's recommended guidelines has been classified as highly hazardous or extremely hazardous. Class II products have been classified as moderately hazardous.

*COD:* Chemical Oxygen Demand - measure for the content of organic compounds in water.

*Code of Conduct:* FAO's international guidelines concerning handling and use of pesticides.

*Codex Alimentarious:* An organisation under FAO/WHO, working out global standards and guidelines for foodstuffs and the production of foodstuffs in order to secure the global supply of healthy and safe food and make trade easier.

**CSR:** Corporate Social Responsibility. Social, environmental and ethical demands made between companies, customers, interested parties and collaborators.

**DDVP:** Insecticide used in rice in India.

**Dengue fever:** Caused by a virus transmitted by mosquitoes. Symptoms are high fever, skin eruption, headache and muscular pain. The occurrence of dengue fever has been steadily rising in South and Central America during the latest 10-15 years.

*Emulsion concentrate:* Mixture of a liquid active ingredient, solvents and surfactants enabling the product to be diluted with water to a low concentrate spray fluid.

**Formulation:** Active ingredient mixed with other substances making the product to a end-use pesticide.

**GMO:** Genetically modified organisms.

**ISO 14001:** International environmental certification covering the surrounding environment.

**KPI:** Key Performance Indicator.

*Malaria parasite:* A one-celled organism living as parasite in humans and mosquitoes. The parasite causes the tropical disease malaria.

*Methamidophos:* Insecticide among others used in cotton and soybeans.

*Methomyl:* Insecticide, in Mexico mostly used in cotton and vegetables.

*Methyl parathion:* Insecticide mostly used in cotton.

*Micro capsules (micro capsule formulation):* Fluid product where the active ingredient is encapsulated in microscopic capsules that are soluble in water.

*Monocrotophos:* Insecticide mostly used in cotton and rice.

MRL (Maximum Residue Level): Maximum residue level of pesticides in foodstuffs.

*OHSAS 18001:* International environmental certification covering the working environment.

**Pesticides** (plant protection products): Collective name for insecticides, herbicides and fungicides.

**Phorat:** Insecticide used against soil pests.

**Prior Informed Consent (PIC):** Prior informed consent that has to be established before a product from the PIC list is exported.

**Product stewardship:** Common description of responsible management of a company's products.

**REACH** (**Registration**, **Evaluation** and **Authorisation** of **Chemicals**): Common EU act on demands for documentation concerning chemicals.

**Registration data:** Test results and documentation that has to be handed over to the authorities in order to obtain sales permissions.

Responsible Care: Objectives concerning responsible conduct, adhered to by Cheminova.

*Suspension concentrate:* An active ingredient in solid form suspended in water with surfactants making the product able to be diluted with water to a low concentrate spray fluid.

*Third party products:* Sales products not produced by Cheminova but bought from other suppliers.

*Toll production:* Production made on behalf of other companies.

*Triazophos:* Insecticide used in cotton in India.