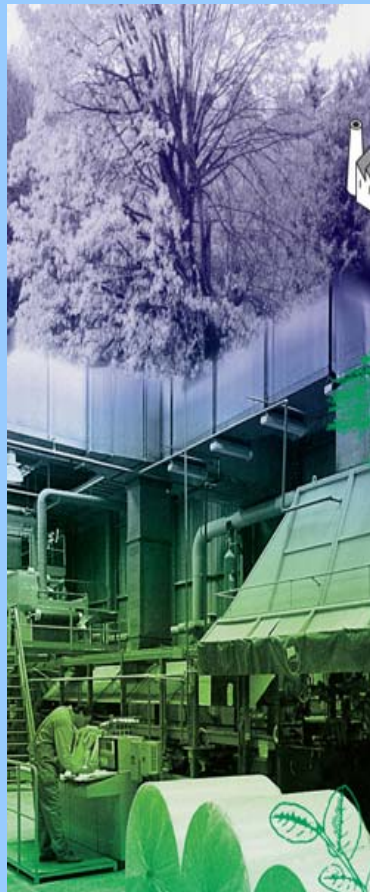


ENVIRONNEMENTAL DECLARATION 2007-2008-2009



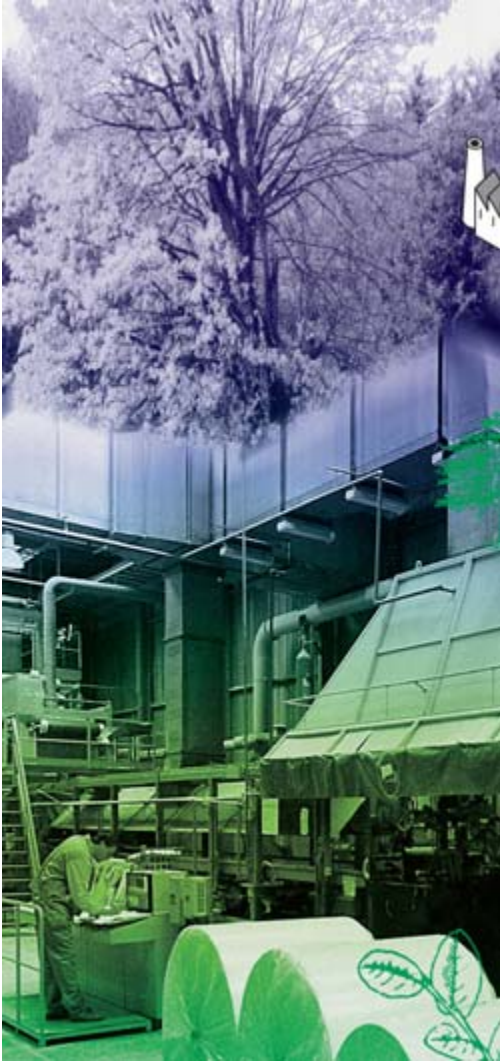
DERBIGUM®

the best for your roof

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ENVIRONNEMENTAL DECLARATION 2007-2009



Dear Madam, Dear Sir

Environmental care has always been one of the main concerns for Imperbel s.a. together with quality and safety.

For this reason Imperbel s.a. decided to commit itself into an environmental policy aiming at the continuous improvement of environmental performances and respecting the rules in force.

Our environmental declaration reflects our concern to be transparent in terms of information towards our workers, customers, suppliers, neighbours and authorities.

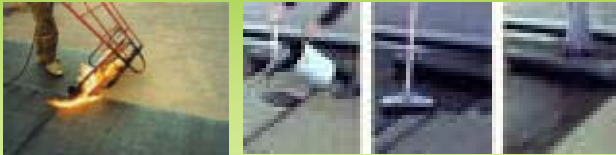
We remain at your disposal for any further information you may require about environmental care policy onto our production site located in Perwez.

André De Smet
CEO

Perwez, 18 September 2007



1. Company description



1.1 Historical background

Imperbel s.a.

The Imperbel production plant located in the industrial estate of Perwez manufactures a wide range of bituminous waterproofing membranes modified by polymers (atactic polypropylene) and accessories (cant strips, edges, bands).

The production level which lay about 4 millions sqm/year in 1983 currently reaches 10.500.000 m², making from Imperbel s.a. one of the most important companies producing bituminous waterproofing membranes.

Consequently, within this framework, the activity of the R&D departement expanded continuously.

Obtaining ISO 9001-2000, ISO 14001 and EMAS recording, also prove to which extent the optimalization of quality, products, manufacturing processes and Environmental care are Imperbel's permanent concerns involving all its workers.

We also implemented a Topomanagement policy, which is a policy based on the participative system aiming at achieving at the lowest cost possible the maximum output of the industrial equipment by maximizing time spend at creating added values.

Today Imperbel s.a. exports ex-Perwez production plant some 60 % of its production towards the Netherlands, Germany, France, Italy, the Scandinavian countries, Spain, Portugal and the Eastern countries.

Expansion project

The Imperbel Group currently consists in two production units :

- Membrane production located in Perwez.**
- Adhesive, mastic, varnish production located in Lot**

Imperbel s.a. was founded in 1932 in Lot (Brussels). At the very beginning the company was dedicated to the production and application of bituminous waterproofing coatings for the roofing sector. Today, in Lot it produces and markets a wide range of mastics, adhesives, bituminous/solvent based varnish and markets a wide range of bituminous based waterproofing membranes produced in Perwez.

In order to reduce logistic costs and to improve synergy between the two sites, the administrators of Imperbel s.a. decided to build a cutback production unit in Perwez and to move the adhesive/mastic and varnish production unit from Lot to Perwez as well.

This industrial reorganization project will happen in two stages :

1st stage (2006) : building of a cutback unit

The cutback production unit consists in the production of bitumen fluxed with solvents (white spirit, benzine..). These products (cutback) are used as raw material in the production of adhesives, mastics, varnishes...

The cutbak production unit is operational since May 2007 and will be controlled according to the EMAS requirements during the audit planned by the end of 2007.

2nd stage : transfer of adhesive, mastic, varnish... production unit from Lot to Perwez

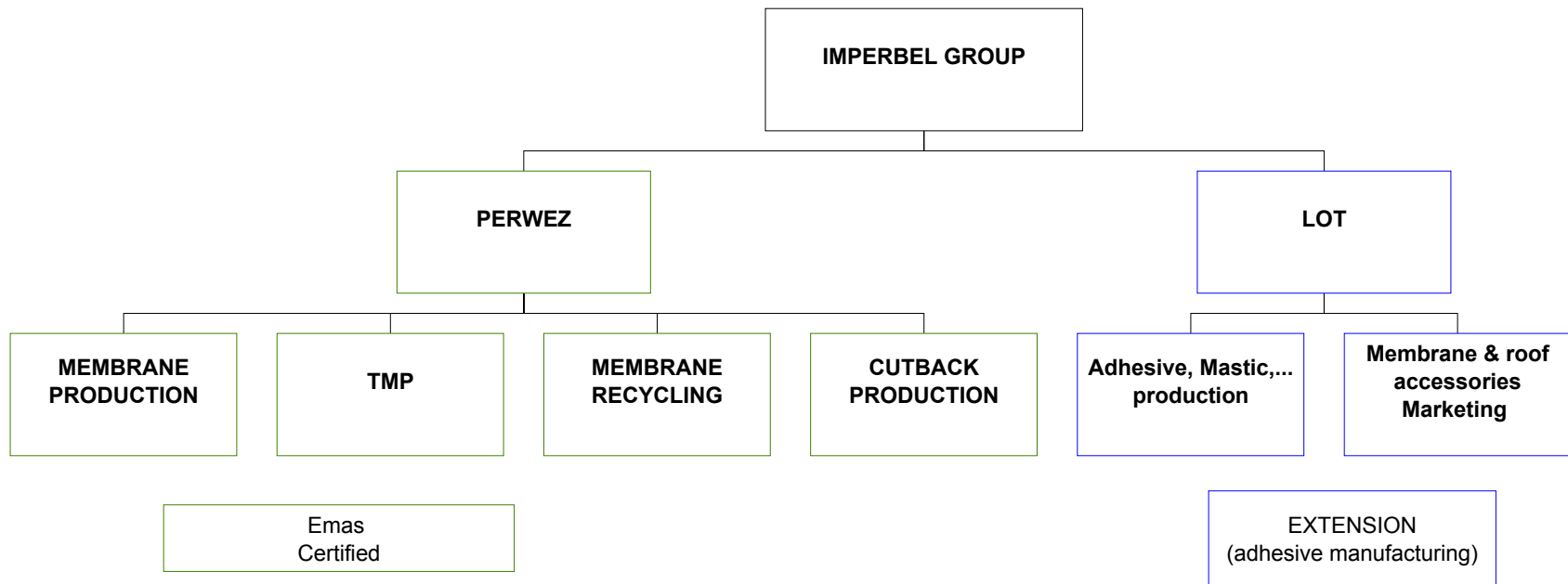
The adhesive, mastic, varnish production process consist in blending several different components (such as polymers, solvents, pigments, fillers...) in tanks held at a temperature ranging around 60°C. After a well specified mixing period, the finished products are packaged in cans and barrels with a capacity ranging from 12 to 25 kg or 1000 L cubitainers.

The transfer of the adhesive, mastic, varnish... production unit to Perwez is forecast in 2009-2010. It will be controlled according to the EMAS regulations.

Remark:

Within the scope of the industrial reorganisation within the Imperbel group, the production line 3 will be moved to unit 1 by the end of 2008 where it will replace the former line 1 production line. Unit 2 will no longer be dedicated to the production of membranes.

This declaration only concerns membrane and cutback production in Perwez.



1.2 **Our Quality Commitment** (signed by all the members of the company in september 2007)

DERBIGUM®
the best for your roof

Our Mission

Our mission is to constantly and significantly satisfy in an enduring way the final client by proven waterproof solutions in the building and construction work areas.

In order to accomplish efficiently this mission, we commit to:

- ☑ participate in an ongoing improvement process in order to obtain permanent and **TOTAL QUALITY** of our products and services.
- ☑ respond to the legitimate requests of our (internal and external) clients and to reinforce their confidence in order to insure prosperity through long-lasting relations.
- ☑ insure a perfect communication with our clients, associates and suppliers.
- ☑ improve continually the performances of the company in **ENVIRONMENTAL MATTERS** and communicate them both inside and outside our company.
- ☑ handle in a way to guarantee the **SECURITY** and **WELL-BEING** of our workers.

18-09-2007

IMPERBEL SA
Bergensekweg 32 - B-1651 Ixel - Belgique
Rue Industrielle - B-1300 Pever - Belgique

1.3 The factory

The factory is built in Brabant Wallon in the industrial estate at the western border area of Perwez, alongside the N243 national road (chaussée de Wavre) between the villages of Thorembais-Saint-Trond and Perwez. Imperbel s.a. recently acquired a plot of land at the backside of the factory totalizing an area of 7 ha 02 a 40 ca .

The central point of the global site is located at about 1.200 meters, as the crow flies, northern of the A4-E411 speedway linking Brussels-Namur-Arlon and at 900 metres, as the crow flies, Eastern of the N29 road linking Gembloux to Tienen.

The site covers three cadastral plots of land.

The authorizations owned by Imperbel s.a. are :

- License to operate a factory for the manufacturing of waterproofing membranes for roofs, terraces, wall lining, balconies, etc. made of bitumen, polypropylene, polyester and fibre glass (delivered on 18 april 2005, ref. REC.PU/05.028, expiry 18 april 2025).
- Permit to run a factory for the production of adhesives, mastics, varnishes, paints, ... (delivered on 18 April 2005, ref. REC.PU/05.028, expiry 18 april 2025).
- Permit to run a fluxed bitumen production unit (CutBack)
- solvent storage – Loading/unloading liquid products.
(delivered on 18 april 2007, ref. 1.777.51 /PE n° 2006.04/JS/pr) expiry 18 april 2025).

View of the Membrane Production Factory



View of the Cutback production Unit



LOCALISATION OF THE FACTORY



	Membrane Production site
	Cutback production + adhesives, mastics.. production project



2. ACTIVITY DESCRIPTION



2.1 Membrane production

The main activity of the company is the production of waterproofing membranes bitumen polymer (plastomer) based reinforced with non woven polyester, fibre glass or polyester-glass grid or polyester-glass complexes.

Products :

DERBIGUM SP and DERBIGUM GC are waterproofing membranes made of direct distillation bitumen modified by atactic polypropylene (APP/TPO), double reinforced with a non woven polyester and a fibre glass.

DERBIGUM owns a technical agreement for all the countries belonging to the European Community. Besides the membrane has been adapted to meet the most severe requirements in terms of resistance to external fire propagation.

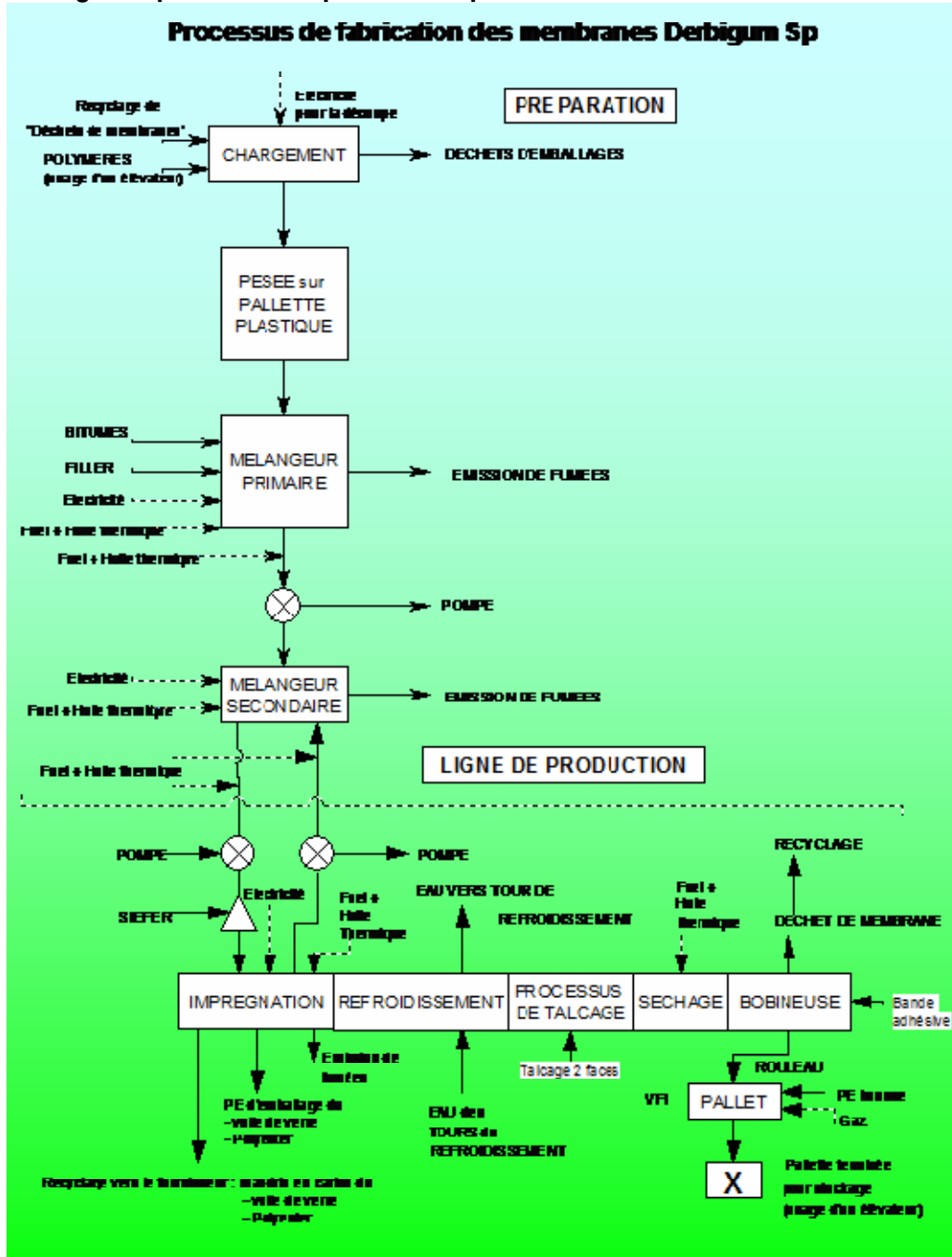
This range of products is completed by :

- An APP/TPO modified bituminous membrane with coloured mineral surfacing named : Derbicolor and Derbislope.
- APP/TPO modified bituminous membranes but single reinforced and used as underlayers named : Derbicoat.
- An innovating membrane enabling passive energy savings thanks to an integrated coating on the top side of the membrane, named Derbibrite.

Applications :

Most common applications are roof coverage, bridges, terraces, roof parkings.

Derbigum Sp membrane production process



2.2 Raw Material transformation (TMP)

TMP is a subsidiary activity aiming at grinding and packaging raw material.



Raw material transformation

a) Grinding and packaging different APP polymers and GUMIX with addition of anti sticking filler.

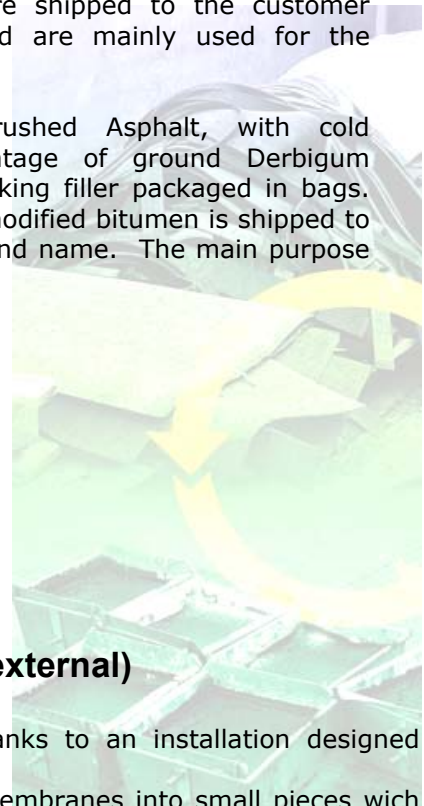
Internal use :

The ground polymers and GUMIX are introduced in the production process as raw material

External use :

The ground polymers are shipped to the customer without brand name and are mainly used for the modification of bitumen.

b) Grinding poured crushed Asphalt, with cold adjunction of a percentage of ground Derbigum membranes and anti sticking filler packaged in bags. The poured ground and modified bitumen is shipped to the customer without brand name. The main purpose is in the road sector.



2.3 Membrane waste recycling (internal and external)

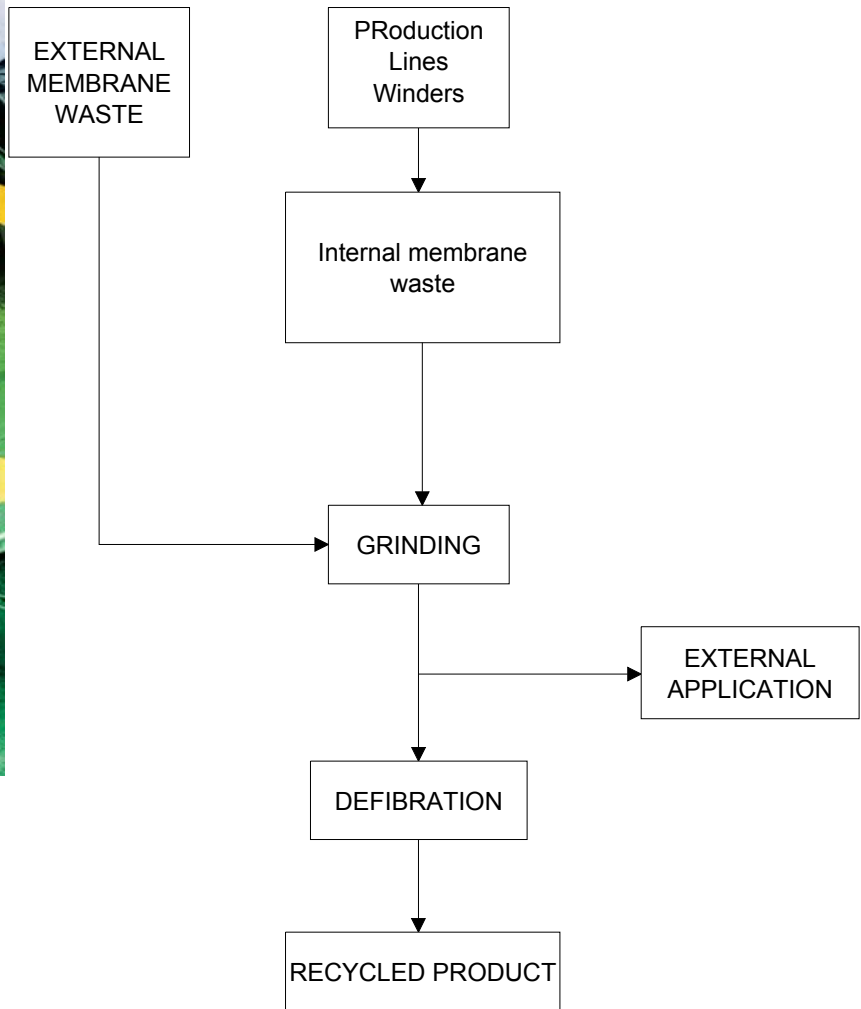
Recycling internal production waste is made possible thanks to an installation designed within the company Imperbel s.a. : the MACALUSOR.

The principle of this recycling process is to pre-cut the membranes into small pieces which are ground and extruded at high temperature so as to delaminate the fibre fleece composing the waterproofing membrane. This delamination frees the fibres into the bituminous blend. The material produced by the installation is collected into moulds. It sets at room temperature. Once solid, the blocks are ground in the installation for raw material transformation thus producing the "GUMIX" which goes back into the manufacturing process of new waterproofing membranes.

External membrane wastes (previously sorted) are also recovered by this recycling unit. In 2008 the recycling unit will be adapted and its capacity will pass from 1500 T/year to 4000 T/year. Besides a large amount of the recycled product will be used warm.



Membrane waste recycling



2.4 Cutback production

The cutback production unit consist in manufacturing fluxed bitumens by means of solvents (white spirit, benzene, ...). These products (cutback) are used as raw material for the production of adhesives, mastics, varnishes, ...
 The Cutback production unit is operational since May 2007.



3. ENVIRONMENTAL POLICY

3.1 Definition of the company's environmental care policy commitment



Environmental Policy of the Company

Environmental care together with quality and safety, have always represented the main concerns of Imperbel s.a. European leader in the manufacturing of waterproofing membranes.

Aiming at protecting the environment, the management and the staff of Imperbel s.a. have decided to commit themselves together in an environmental care policy focusing on the continuous improvement of its performances in terms of environment taking the best available and economically viable technologies into account. The aim of this improvement is to go further than the requirements settled by environment rules and legislation.

To reach this goal, following actions were implemented

PREVENTION

- Promote sense of responsibility at each level based on a training and information programme
- Ensure preventive measures to get rid of any accidental pollution or discharge in the natural environment

MEASURES AND CONTROLS

- Examine each significant impact on the Environment due to current or coming activities.
- Establish and apply control procedures in order to check the conformity of our environmental policy.

PARTNERSHIP

- Keep the necessary information exchange with the neighbourhood to enable a better understanding of the company's environmental impact.
- Ensure a permanent dialog with the local and regional authorities.
- Inform suppliers and customers about our environmental actions.

RESEARCH AND DEVELOPMENT

- Each time it is possible we tend to reduce waste and natural resources consumption through a collection and recycling system and through developing innovatory technologies allowing to constantly improve our environmental performance.

Perwez, 3 September 2007

André De Smet
CEO

3.2 Responsible care commitment

Since 1994 Imperbel s.a. committed itself to respect the leading principles of Responsible Care.

The member companies of Fedichem (Fédération des Industries Chimiques de Belgique), which adhere to Responsible Care positively commit themselves to implement any possible action to continuously improve their performance in the fields of safety, environmental and health care.

In 2000 our company was awarded a special mention at the Responsible Care contest.

This prize is granted by the Belgian Chemical Industry to the company/companies as a recognition of their remarkable contribution to the significant improvement of safety, hygiene and environmental protection.

Our company was rewarded for the conception of an original recycling technique to eliminate dumping its production waste.

3.3 Commitment to the Branch Agreement

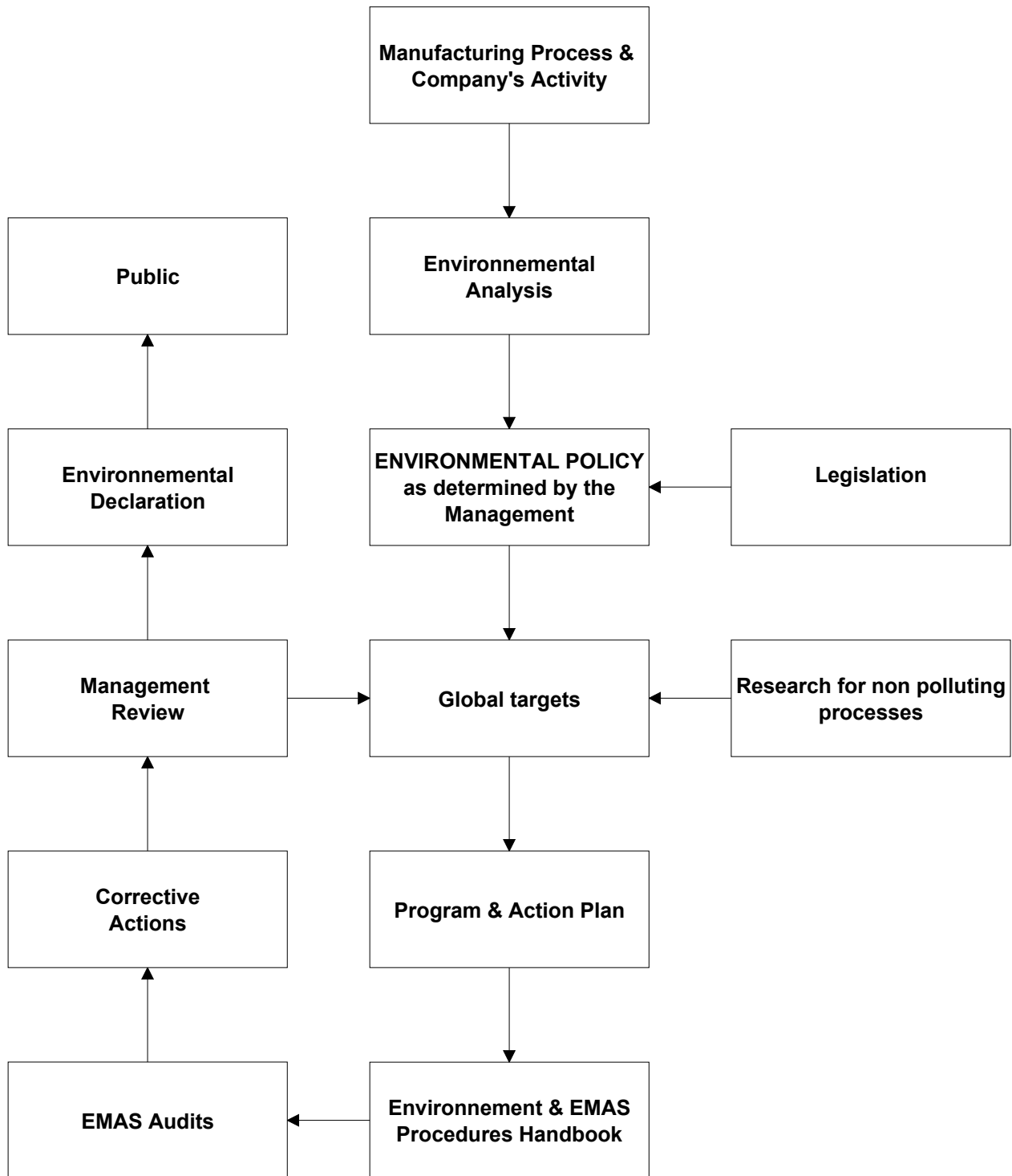
In 2003 Imperbel s.a. committed itself to reduce its CO₂ emission with 16% by the end of 2012 by taking part in the Branch Agreement of the chemical industry of Wallonia.

This commitment was determined according to an Audit performed by Econotec and in collaboration with Fedichem. Twenty three paths to reduce our emission were determined.

« By the end of 2007 we have already reduced our consumption by more than 14% compared to 2000. The 2012 target is already nearly reached... »

3.4 Implementation of a Management System

An Environmental Management and Audit System fixes the elements necessary for the implementation of an environmental policy : organization, structure, responsibility, procedures, processes, controls.



Elements required for the implementation of an environmental policy :

The environmental analysis aims at identifying and analyzing the significant environmental impacts generated by our activity. This analysis was performed by COMASE in 1997 and is updated regularly..

The environmental policy formalizes Imperbel's commitment and is undersigned by the Chief Executive Officer.

Regulations complete the analysis based on the full range of legal requirements in force.

Global targets are chosen in order to reduce some significant impacts or improve their control.

The Action programme and plan is a detailed list of actions to carry out over three years.

The Environmental Guideline and EMAS procedures describe the structure and working method of the environmental system. More details below.

The EMAS audit is an internal and external analysis tool to check the smooth running of the EMS. An internal audit schedule together with an external follow up audit are carried out annually. The results are communicated to the management team. Possible shortcomings detected are listed and corrections are determined.

The environmental declaration is an external communication tool. It aims at being open, understandable and complete. It is available on simple request and in the future on our Intranet web hosting system.

This declaration together with the EMS are checked and certified by an external accredited controller before being recorded by the competent authority (Walloon DGRNE).

3.5 Environmental system literature

This documentation consists in :

- Environmental Management handbook
- Handbook of procedures
- Inventory of environmental effects
- Rules register

Contents of the environmental Management handbook :

- Environmental policy of the company undersigned by the general management.
- Target planification and environmental programme.
- The whole range of available, used and controlled procedures together with their distribution over the company's different departments.

Procedures handbook

The procedures handbook is written so as to fit the EMAS & ISO 14001 regulation standards. It contains the whole set of operating sheets, forms and enclosures related to the different items ruled by ISO 14001.

Inventory of environmental effects :

This documentation reflects the company's organisation through its different activities under the shape of a fonctionnal flowchart completed by a description of the activities. Starting from this flowchart, the operational units the activities of which might affect different aspects of the environment have been identified. In agreement with the EMAS regulations, the following issues listed in the EMAS regulation enclosure are examined within the scope of the environmental analysis :

- Assesment, control and reduction of the activity's impact onto the different environmental areas.
- Management, savings and choice in the energy area
- Management, savings, choice and supply in the fields of raw material, management and savings in the water area.
- Waste reduction, recycling and re-use, transport and disposal.
- Noise evaluation, control and reduction inside and outside the factory.
- Choice of new production processes, modifications to the existing processes
- Product planification (design, packaging, transport, use and disposal)
- Results in terms of environment, contractors, sub-contractors and suppliers' practice in this respect.

- Prevention and reduction of environmental accidents.
- Emergency procedure determination in case of environmental accidents.
- Staff information and training with regards to the environmental problems.
- External information about environmental problems.

Rules register :

This register takes all the law texts in force and in application for the factory.

3.6 Corrective and preventive actions

The company resorted to procedures enabling to take corrective and preventive actions in order to eliminate the reasons underlying non conformities, internal or external, and to avoid their repetition.

The origin of these non conformities can result from :

- Results of survey and measurement operations
- Waste management and elimination
- Follow up of suppliers' respect regarding their duties
- Control of the cleanness on the work zones

or come from environmental claims uttered by the neighbourhood

As soon as the results of corrective or preventive actions have proven to be efficient, they will result in reviewing the survey and measurement procedures together with revising the intervention plans brought in within the framework of emergency situations.

Fire alert simulations are carried out once a year, implying both the members of the factory and public safety officers (fire brigade, Red Cross, etc...).

3.7 Training, information and communication

One of the major concerns of Imperbel. s.a. is to train its personnel. To this extent, specific sessions in terms of "environmental care" are organized regularly.

Internal auditors were specifically trained to check and insure that the company's activities are in agreement with the documented requirements.

The internal audit procedure comes from the existing quality system which has been adapted to integrate the environmental regulations and more specifically the conformity audits with the statutory regulations.

Within the scope of EMAS, Imperbel s.a. also organizes external and internal information, consciousness-raising and communication sessions about its actions and environmental policy.

Imperbel s.a. pays great importance to external communication. To this end :

- Open door days are regularly organized to highlight its environmental management for the attention of neighbours, suppliers, customers and local authorities
- An information bulletin is addressed to the neighbours and local authorities once a year relating the environmental targets achieved over the passed year.
- A « green Tour » is offered to all our visitors to show the great concern about environment all along the membrane production process and its recycling.



4. SIGNIFICANT IMPACTS ONTO ENVIRONMENT



Imperbel s.a. identified the whole range of significant impacts. For indirect significant impacts we refer to chapter 6. LCA (Life Cycle Assessment).

4.1 Above ground water

The existing sewerage network of Imperbel s.a. is a single network collecting both industrial waste water, run-off water on the storage and parking yards, rain water from the roofs as well as domestic waste waters.

Domestic waste waters are collected in an independent sewerage network connected to septic tanks before joining the single network.

The industrial waste water sewerage network is fitted out with several hydrocarbon separators and decanters before discharge.

These separators are controlled and maintained twice a year by a specialised external company.

The forklift truck wash unit is equipped with a individual purifying station (biological treatment). This installation is checked and maintained by an external company.

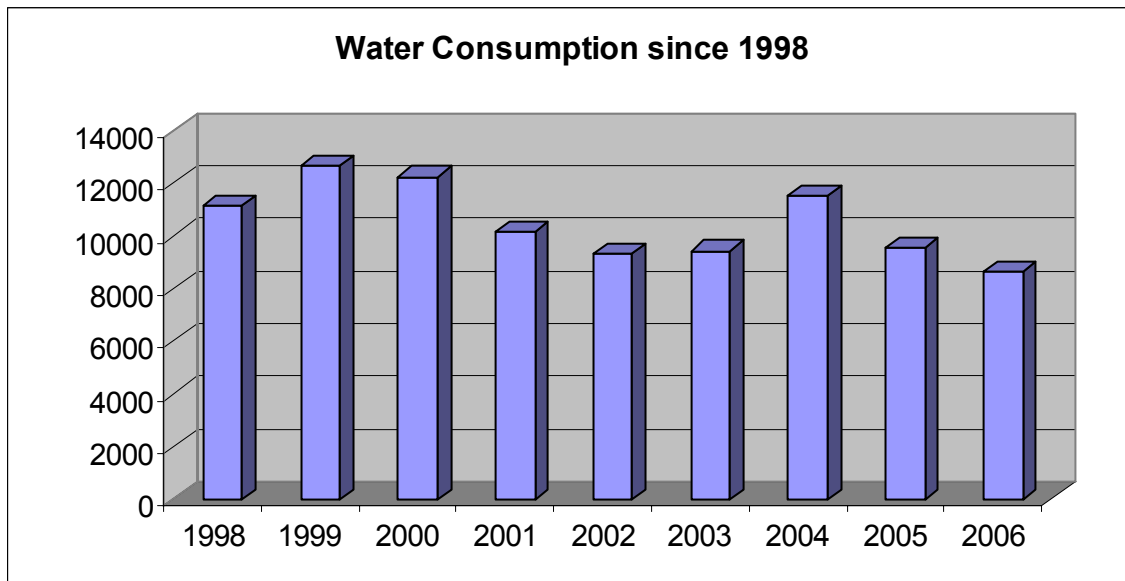
Water consumption

Water used in the factory comes from the public water distribution company. It is softened before being used for :

- cooling the production lines ;
- washing the exhaust fumes ;
- domestic use (sanitary, shower, kitchen...)

The quantities of consumed water over the past years by Imperbel s.a. figure in the table below :

Consumed Quantities (m ³)	1998	1999	2000	2001	2002	2003	2004	2005	2006
Domestic	2259	2085	1518	2068	1688	2462	2608	1699	2379
Industrial	2075	1781	2093	1498	2016	2149	1861	2351	1458
Evaporation	6777	8790	8628	6614	5637	4820	7031	5526	4760
Total Consumption	11111	12656	12239	10180	9341	9431	11500	9576	8597



It should be noted that a major part of the consumed water evaporates in the cooling devices of the membrane production process, cutback production and gaz exhaust washing towers.

Accidental water pollution management

A management procedure of accidental water pollution is foreseen within the scope of the internal prevention management program in case of emergency implemented by Imperbel s.a. The plant is equipped with a safety valve at the end of the installations and a buffer tank to collect contaminated water.

Analysis of rejected waters and maintenance of the equipment

The quality of water thrown by Imperbel s.a. is controlled in accordance with the waste disposal authorizations. Annually a certified laboratory of the Walloon Area (CDEBEAU asbl) controls the quality of rejected waters according to a standardized procedure with an automatic sampler coupled to a flow meter enabling to obtain the

analysis results of a composite sample within 24 hours (based on a one week campaign)

Compounds	Requirements	Results 2007
Temperature	45°	18.1
Matters in suspension (MIS)	1000 mg/l	8
Chemical oxygen request	195 mg/l	57
Petroleum ether (ligarine) extractible matters	500 mg/l	0.70
MIS dimension	10 mm	< 10mm
PH min	6	7.8
PH max.	9,5	7.8
Biological oxygen request	70 mg/l	15
Kjeldahl nitrogen	40 mg/l	28.8
Total Phosphates	2 mg/l Phosphorus	0.79
Acetylene tetrachloride extractible nonpolar hydrocarbons	5 mg/l	0.10
Total detergents	5 mg/l	0.27
Ammonia nitrogen	35 mg/l nitrogen	24
Nitrate	5 ml/l nitrogen	1.8

An external company checks the hydrocarbon separators, the forklift trucks wash station, and safety valve twice a year.

Improvement balance 2004-2006 and 2007-2009 targets

A set of hydrocabron separators has been installed in order to treat 100 % of our waste.

On the other hand, due to the expansion of our site (adhesive, mastics... production) it is planned to build a separate sewerage channel for different flows (rain, domestic, industrial water). A 400 m³ retention basin will be installed at the lowest point of the site to hold back all the waters in case of accidental pollution.

4.2 Atmospheric emission sources

The gaz emissions collected from all the Imperbel s.a. factory are treated with four types of purification equipement :

- Washing towers or scrubbers ;
- Thermic oxydizer ;
- Dust removers ;
- Activated charcoal filter

Washing towers

Vapours produced along the production lines during the membrane manufacturing process, exhausts produced at the cant strip production units, gaz flows produced by the membrane recycling installations and filling the liquid APP storage tanks, are directed to the washing towers.

Despite the high outputs, the concentrations in polluting components of the flows is very poor.

Analyses are performed once a year by a certified body. The results of the last measurement campaign are listed below

Analysis results atmospheric emissions issued from the fumes washing units	
	Average results 2007
Total hydrocarbon measured content (C ₁ /Nm ³)	14.5 mg/Nm ³
Requirements Environment Permit	100 mg/Nm ³

As it shows, the results obtained are far below the standards. The quality of these results is highly due to investments made in 2002 and the acquisition of a thermic oxydizer to treat the most concentrated flows.

Fumes washing tower Unit 1



Thermic oxydizer

The vapours of the bituminous blend mixers from the preparation zone and bitumen storage tanks vents are connected to the thermic oxydizer. This installation is operational since 2002. The polluted gases are incinerated in the burner which is working on natural gaz.

The energy contained in the purified effluents is used to pre-heat the gases before their treatment and to heat the hot oil used for the production of bitumen blends.

Thermic oxydizer



Thanks to this installation flows with relatively high VOC concentrations are treated preserving very low value release. On the other hand, the absence of bitumen smell at the outlet of the oxidizer is warranted by the supplier.

Analysis results atmospheric emissions from the thermic oxidizer	
	Average results 2007
Total hydrocarbon (C ₁ /Nm ³)	16 mg/Nm ³
Requirements Environment Permit	50 mg/Nm ³

Dust Removers

Several installations on the plant release dust mainly during application of the surfacing products (sand, talc, ..) on top of the membranes or filler incorporation into the blends. Dust removers warrant the suction and reduction of these particles. A daily check of the dust removers warrants the absence of dust in our halls.

Thanks to this equipment, dust rates on the working place is far below the legal requirements.

Dust remover production line n° 3



Other emission sources in the Imperbel s.a. factory

- Boilers

There are 10 boilers in the Imperbel s.a. factory. These are checked annually, and adjusted by a certified body.

- Besides the collected wastes, Imperbel s.a. also presents miscellaneous emission sources produced by R.M.T. « Raw Material Transformation » activity.

Atmospheric emission analysis and installation maintenance

All the atmospheric emissions are controlled annually by a certified body and are subjected to a report.

2004-2006 improvement balance

- Implementation of a collection system of the site's diffuse emissions (Liquid APP pouring).
- Continuous research to find complimentary processes to improve the level of our emissions.
- Implementation of dust free incorporation process for fillers into our blends
- All the burners of our fuel fed boilers were replaced with natural gaz fed burners, considerably improving the Nox emission

Future improvements 2007-2009

The main future targets for 2007-2009 are :

- Implementation of a treatment device for emissions produced in the membrane recycling unit (see active charcoal treatment, oxydizer....)
- Further efforts will be undertaken to reduce odour concentration of remaining effluents. These efforts mainly focus onto the reseach of processes or techniques enabling to reduce the olfactory emissions of our washing towers.
- A meeting with several bitumen transport companies will be fixed in order to make drivers aware of the importance to respect the unloading procedure.
- Control and preventive maintenance of the fumes exhaust washing system.
- Implementation of an olfactory measurement system for the global site.
- Foresee fumes treatment produced in the lab hall

Emissions produced by « Adhesive, mastic, varnish production unit...”

Waste coming from preparation mixers are directed to the oxydizer and vapours in the storage tank are recovered during the liquid raw material unload operation (loop system between suppliers's truck and storage tank).

Emissions due to solvant evaporation during the draw-off operation are considered negligible in view of the characteristics of the manufactured bituminous products (strong viscosity).

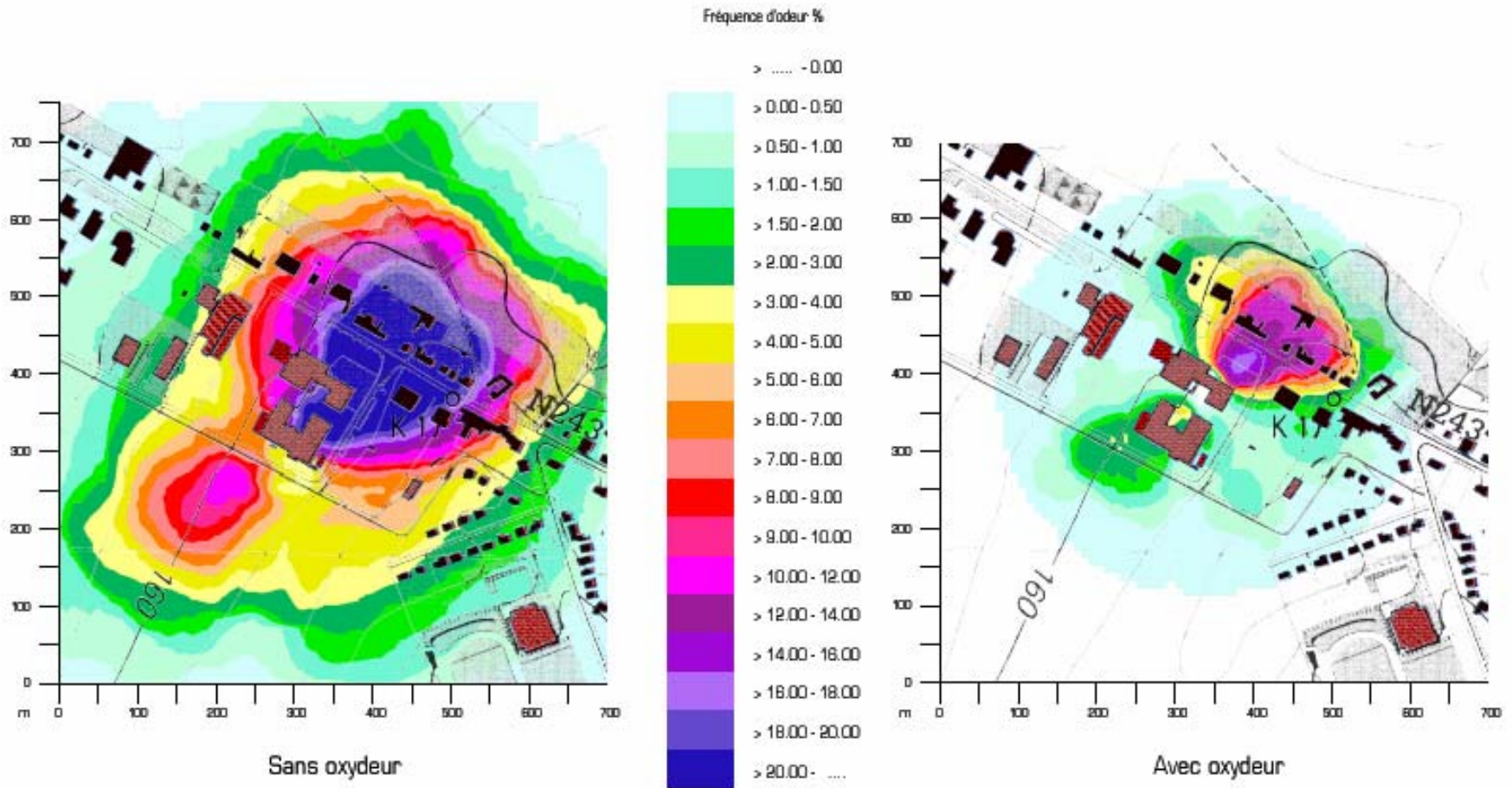
4.3 Smells

Improvements brought to our fumes collecting and treatment system enabled to significantly reduce the olfactory impact of our plant. A complete study of this impact

has been carried out by Serco office on which basis a smell dispersion map could be drawn showing the situation before and after the installation of the oxydizer. This maps shows perception areas in functionof the a time percentage. A zone with 0.5 % means a smell is perceived by a population during at least 0.5 % of the time.

Future improvements 2007-2009 : see paragraph 4.2

Map before-after oxydizer installation



These maps highlight the clear improvement that was achieved. If we consider the 2% area as being the limit, we notice that the smell can be perceived in an area of 250 m alongside the road named "Chaussée de Wavre" whereas previously this area stretched over 500 m along this same road, 300 m towards the inhabited area of Perwez and 200 m southwards.

4.4 Waste

The different types of waste produced in the factory are :

- Raw material packaging (bags and big-bags) such as talc, aluminium trihydrate, calcium carbonate, solid polypropylenes, slate, reinforcement packaging and mandrels, wooden pallets, finished products packaging... All these waste are subject to internal and external valorisation.
- Non conform membranes : the membranes are recycled internally and go back into the production process of new waterproofing membranes.
- Blend waste : blend waste collected in the decantation tanks between melters and mixers and from the dipping tanks cleaning are eliminated in category II technical disposal centres (TDC)
- Category II waste : non recyclable waste such as different non recyclable packagings, reinforcement scrap, tapes are eliminated in category II Technical Disposal Centres (TDC)
- Category III waste : raw materials such as talc ; aluminium trihydrate, calcium carbonate, sand and slate are eliminated in category III Technical Disposal Centres (TDC).
- Domestic waste coming from administrative and social premises (office, canteen, restroom,...) are eliminated in category II Technical Disposal Centres (TDC).
- Paper and cardboard from administrative services are taken back by an external recycling company.
- Waste coming from the maintenance and repair of production equipments, gaz emission purifying devices, process water cooling installations, forklift truck (oil, absorbants and cloth, emulsion, aerosol, solvents, TL lamps, used filters, electric/electronic material, chalk + oil, mud, cleaning product packaging (paints, solvents,...). These wastes are eliminated through the hazardous waste network (agreed collector Shanks)

Imperbel s.a. is member of VAL-I-PAC which is in charge for collecting and recycling waste generated by the company and takes part in the BITUBEL « prevention plan » system

All these wastes are sorted out according to an elimination procedure for internal and external waste.

Special care is paid to make a quantity and quality waste analysis.

Specification sheets determining the requirements are signed for agreement by the supplier and Imperbel s.a. These requirements are determined so as to reduce throw away packaging.

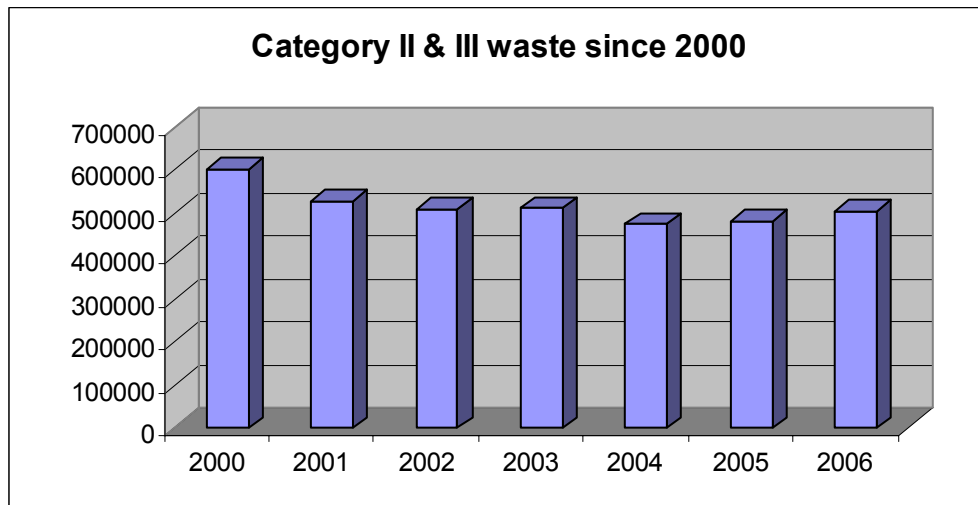
As for membrane waste, Imperbel s.a. invested in developing a technology enabling its recovery into the production of new membranes.

2004-2006 Improvement balance:

The implementation and optimization of our recycling technique enables to recycle 100 % of our production membrane wastes (except Derbigum Alu). On the other hand, a strict follow-up and in-depth analysis significantly contributed to cut down the quantities of category 2 and 3 wastes as shown in the following table :

2000	2001	2002	2003	2004	2005	2006
600380 kg	526868 kg	508250 kg	509850 kg	473980 Kg	479700 Kg	502830 Kg

Evolution waste quantity (excl. production waste)



2007-2009 TARGETS

In order to pursue efforts already undertaken, additional analysis tables are kept up to date to have a historical background and accrued detection system of the various potential waste sources.

Waste from « Adhesive, mastic, varnish.. production » project

Possible waste issued from the production of adhesives, mastic, varnish, paints... by Imperbel s.a. should be limited to empty raw material packaging and installation maintenance waste (iron scrap, cloth, used oil, ...).

All these wastes are collected by an approved company for the collection and treatment of hazardous wastes.

4.5 ENERGY



Imperbel s.a. resorts to the following energy sources :

- Light fuel ;
- Natural gas ;
- Liquid propane gas ;
- Electricity.

Improvement balance

Since 2000 Imperbel s.a. committed itself into a programme to reduce its energy consumption and CO₂ emission.

It proceeded to several investments to optimize the heating process of the bituminous blends by installing a new centralized natural gas heating room, great power engines modulation, and follow up of the weekend consumptions.

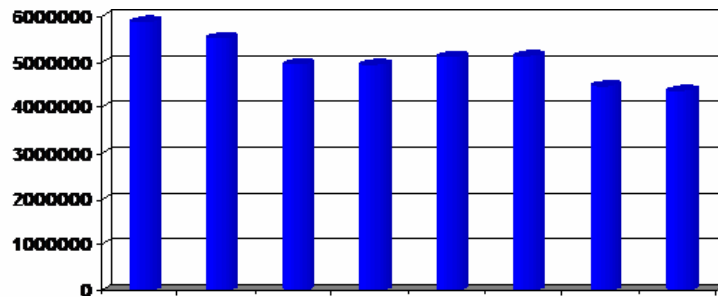
End 2003, in order to dynamise this management we entered into the Kyoto agreement via the « Branch Agreement ». Our contribution implies the reduction of specific consumption by 16% by 2012 in comparison to 2002.

To this end an audit and annual certification system has been instituted together with a specific Team which meets regularly to analyse and find new ways to reduce consumptions. In 2006, investments in the preparation process reduced the electric consumption by 12% compared to 2005. Other works, without nearly any investment, were launched to optimize the heating process of the blends which will also help to reduce energy consumption.

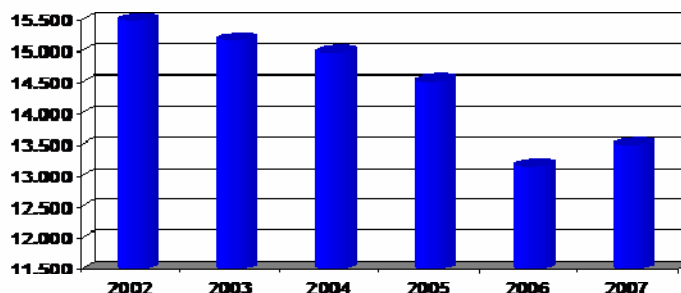
Up to now, we reduced the global consumption by 14% compared to 2000. The 2012 target is nearly achieved.

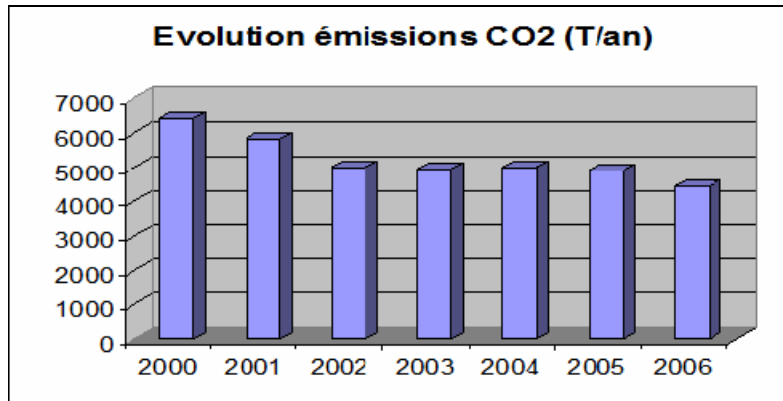
Graphs below show the electric, thermic and impacts of CO₂ emission evolutions

Global electricity consumption (kwh)



Global natural gaz consumption





Future improvements 2007-2009.

- Main improvements will bear onto the pursuit of the gas conversion of the equipment on the plant and replacement or improvement of energy consuming installations.
- Reorganization of Unit 1 blend preparation area
- Reorganization of Unit 2 blend preparation area
- Transfer of production line 3 into production unit 1
- Hot treatment of defibered recycled material

Energy of the "Adhesive, mastic, varnish..." production unit

Two natural gas supplied hot water boilers are foreseen for the entire feeding of the new production plant of Imperbel s.a. (heating of the building, the bitumen and water). Electric forklift trucks will be used inside the building.



5. OTHER FACTORS INFLUENCING THE RESULTS IN TERMS OF ENVIRONMENT

5.1 Noise

All the sources of noise related to the activities of the Imperbel s.a. company are listed below :

- Traffic of vehicles from outside the plant (trucks, tank-trucks, suppliers' or customers' semi-trailers, employees' cars,...) ;
- Traffic of vehicles inside the factory (forklift trucks) ;
- Air suction systems of the gas emission treatment equipments (cleaning, incineration, and dust removing equipments) ;
- Cooling devices of production water

The sonorous sources as well as their characteristics can vary in the course of time and space, depending on the production periods.

2004-2006 Balance

Annoyance control :

The environment manager measures the noise level punctually at the frontage. Results obtained during the recent measurements are still beneath the run licences requirements.

For the forklift trucks, the staff is regularly trained to the driving rules that have to be respected.

Controls and maintenance are foreseen for the air suction systems of the gas emission treatment equipments (cleaning, incineration and dust removing equipment):

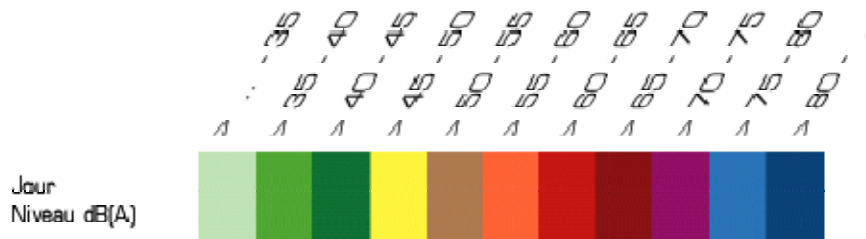
- Weekly check list carried out by Imperbel s.a. staff
- Maintenance contract with external companies

2007-2009 Targets

A new itinerary and access procedure to the site will be implemented to avoid trucks from passing in the inhabited area. This new itinerary will come true depending on the implementation of a new space planning of the Industrial Estate.



Noise map



On this noise map one can notice that the activity of Imperbel s.a. has no impact on the zone located North of the factory's buildings (Chaussée de Wavre road). A slight impact is perceived on a short distance (150 m from the limit of the plant). In this area the calculated levels range around 40-50 dB (A).

5.2 Visual Impact

The arrangement of the site in itself was conceived caring about integrating the industrial buildings into a pleasant environment.

Imperbel s.a. attaches much importance to keep open spaces without buildings and cares about the environment of the factory.

5.3 Soil and underground

No accidental ground pollution ever occurred since the start of the activity of Imperbel s.a.

All the surfaces are water repellent (concrete slabs) except the lawn in front of the main entrance and the piece of land on the backside of the buildings.

All the underground buried tanks undergo an impermeability test as required by the Region Wallonne.

All the sewage pipes were checked in April 1999.

Soil composition	Sand of Brussels Yellow Sand Chalk with sandstone beds
------------------	--

Depth of the waterbearing nappe

1. Drilling made in 1930 : static level reached - 24.23 m
- 2.. Drilling made in 1964 : static level reached - 17.80 m

2004 – 2006 improvement balance

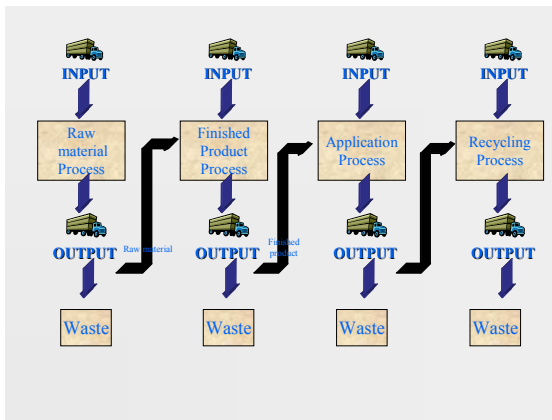
- Impermeability check of the buried cisterns. Done
- Light fuel storage tanks ((2 x 46.000 l) have been inerted.
This choice was motivated by the will to use natural gas as main source of energy.

Future improvements 2007-2009.

- Inert existing 10.000 L tank containing light fuel. This choice was motivated by the will to use natural gas as main source of energy.

Soil and underground of « Adhesive, mastic, varnish... production unit » project

All the process areas will be waterproofed and storage areas of hazardous products or wastes (namely flammable products) will have to meet legal prescriptions (storage place, filling and emptying conditions, stability and solidity conditions, protection against corrosion, impermeability and waterproof burying conditions, safety device against over-and underpressures, earthing, ...).



6. LCA (Life Cycle Assessment)



This concerns an evaluation of the global product performance within the framework of environmental care.

This assessment touches various environmental aspects relating to the production plant, as well as the upstream and downstream effects of the production process, and consequently outside the factory.

Downstream production effects taken into consideration are :

- On one side, effects due to the application of the product on the roof, for instance : sources of energy (hot applied), wastes (from packaging and cuts of the membranes, recycling possibilities)
- On the other hand, effects linked to the longevity (durability) of the product on the roof. The longer the durability, the less membrane replacements will be necessary and consequently the less waste will be created. Several "roof" enquiries have been carried out by independent offices in order to confirm this durability. Today it reaches at least 30 years.
- In this approach, it is important to develop contacts with our customers, contractors, roofers and end-users to ensure that their application methods and waterproofing maintenance are carried out properly in order to increase the longevity of the roofs.

Upstream environmental effects linked to raw material, hereafter called "RM entries".

Indeed these «RM entries » have also environmental impacts for the suppliers

- Sources of energy to produce these « RM entries »
- Emission during the production process
- Waste during the production process
- Raw material necessary for the production of these « RM Entries » (this can result in a more or less long list of suppliers depending on the type of « RM Entry »)
- Energy linked to the transport of « RM Entries »

Bearing this upstream situation in mind, it is important to have well developed contacts with our suppliers. This is also the reason why we launched an

“Environmenta Enquiry” for the attention of our suppliers in order to collect as much data as possible regarding environmental impacts.

This analytical approach meets our environmental strategy and goes beyond the EMAS certification as our suppliers actively participate in this approach by transmitting their level of energetic consumption, waste produced for the products they supply.

Consequently their implication towards Imperbel s.a. is more important as it does not only come down to deliver a technically conform product but also a material with an acceptable environmental score regarding the energy consumed, the emission and waste produced during the production process.

Adding these data :

- Upstream the production (suppliers)
- Production site (Imperbel)
- Downstream the production (roofers, customers)

enables to reach a global evaluation of the environmental aspects related to our product.

Within the LCA assesment, Imperbel s.a. contacted several official bodies :

Holland	Ivam (University of Leiden)	Audit LCA
BDA (Bureau Dak Advies)		Audit LCA
Dak en milieu		
CSFE – PriceWaterhouse Coopers		

Imperbel s.a. committed itself into this process on request of its distributors. Indeed some countries show an increasing will to classify the environmental performances of each product used in the building sector.

« Environmental and Sanitary Declaration sheets » were drawn taking the environmental impacts into account at each stage of the life of a product or system starting from the extraction and/or production of the constituents till the end of the work, with destruction, valorisation upgrading or disposal of the material.

Annexe n° 1

ENVIRONMENTAL PROGRAMME 2004 - 2005 – 2006

TARGETS

TRAINING

Train staff to respect the environmental procedures

- Newly hired staff (Imperbel s.a. project included)
- All the members of the staff (new training cycle – refresh)

Atmospheric discharge

- Control and preventive maintenance of the fumes cleaning system
- Atmospheric discharge and smell reduction or disposal
 - Foresee filler incorporation (into de melters) in liquid medium. (Avoid talc dust around the melters)
 - Plan feasibility study
 - For the fumes washing towers : studies will be carried out to optimize other treatment techniques adapted to the release encountered
 - Foresee lab fumes treatment
 - Foresee construction of suction tunnel for defibered material
 - Connect membrane recycling fumes suction tubes to the oxydizer
- Foresee filtering system to reduce COV of the remaining flows on the site (Liquid APP, ...)
- Plan feasibility study
- Bitumen trucks unloading :
 - Fit all the trucks from Buxant with air capturing system so as to avoid degassing during unloading operations
 - Plan sensitivation of truck drivers
 - Write new unloading procedure for bitumen trucks
 - Analyse results
- Project « Adhesives, mastics, ... production »
 - Liquid products release are sent to the atmospheric treatment installation of the « membrane production » site

2004	2005	2006
DONE	DONE	DONE
DONE	DONE	DONE
DONE		DONE
		RUNNING
		STAND BY
DONE		
DONE		
		DONE
DONE		
DONE		
DONE		
DONE		
		effective in 2009-10

- Project « Adhesives, mastics, ... production »

Wastes will be limited to empty raw material packaging and to equipment maintenance waste (scrap iron, cloth, used oil...).

All these wastes will be collected by a certified company for the collection and treatment of dangerous wastes.

Soil and underground

- 100 % Valorisation RM recovered on the storage yard
- Check waterproofness of buried tanks
- Inert 1 x 46.000lit ; 1 x 46.000lit 1 x 10.000lit. tanks **Ok for the 2 46.000 lit. tanks. The 10.000 l tank will be done by 2009.**

- Project « Adhesives, mastics, ... production »

All the exploitation zones of the site are waterproofed and storage zones for dangerous goods or wastes will have to meet regulations related to localisation, filling/emptying conditions, stability and solidity conditions, protection against corrosion, watertightness, safety device against over /under pressures, earthing...)

Noise

A new itinerary and access plan for incoming/leaving trucks will be implemented so as to avoid trucks in the inhabited area (for the whole site)

Energy

- Monthly analysis of energy consumption (environmental balance sheet)
- Drawing a global energy dashboard : electricity, gas, fuel, propane.
 - Energy consumption reducing project for the blend preparation unit 1
- Reducing electric consumption
 - Carrying out an energetic audit : "accord de branche"
 - Weekend consumption analysis
 - Placing crepuscular sensors in the halls
 - Foresee time delay device on heating room and other lab equipment
 - Stop small consumers during production stops
- Reduction gas consumption

effective in 2009-10		
DONE	DONE	DONE
	DONE	
		DONE
effective in 2009-10		
effective in 2009-10		
DONE	DONE	DONE
DONE		
		DONE
DONE		
DONE	DONE	DONE
DONE		
	DONE	
	Non stop	

- replace hot oil boiler with a natural gas heater
- Partly replace fuel and bulk gas by natural gas
- Integrate « adhesives, mastics... production » project in the energy consumption reduction philosophy

Actions in case of emergency

Capacity to react in case of accidental pollution of waste waters :

- Application of preventive emergency procedures
- Adapt prevention emergency procedures to the « adhesives, mastics,... production »

Measures & controls

Analyse results in view of their requirements for each field listed below

- Disposal of waste waters
- Fumes washing installation
- Noise in the close neighbourhood of the cy
- Dust hoovering installation
- Forklift truck washing station + hydrocarbon separator
- Flow measurement in the pipings
- Adapt control procedures to « Adhesives, mastics...production » project

Annual environmental report (internal)


- Collect all the environmental information – management

ISO14001 – EMAS Certification

- Adapt the environmental handbook and all the procedures to the « adhesives, mastics... production » project

Environmental Audits

- follow up of the audit planning + corrective actions
- Integrate the « adhesives, mastics, ...production » project in the audit planning

 = realisation period

DONE		
DONE	DONE	DONE
effective in 2009-10		
DONE	DONE	DONE
effective in 2009-10		
DONE	DONE	DONE
DONE	DONE	DONE
DONE	DONE	DONE
DONE	DONE	DONE
DONE	DONE	DONE
DONE	DONE	DONE
effective in 2009-10		

DONE		
effective in 2009-10		
DONE	DONE	DONE
effective in 2009-10		

Surface waters

- « Adhesives, mastics, ...production » project

For the extension of the site (adhesives, mastics,... production) a separate sewerage is foreseen for various flows such as rain, domestic, industrial waters)

A 400 m³ collection basin (with hydrocarbon separator) will be settled at the lowest point of te site so as to collect all the waters in case of accidental pollution of the site.

Wastes

Finished products

- 100 % valorisation of Derbigum waste

Packaging waste :

- Input : ensure computer assisted management of the packaging waste

- Output:: recycling packaging brought on the Belgian market

Inert Waste :

- Waste collected on the yard valorisation

- Reduction of category 2 & 3 waste

Various Waste:

In order to pursue undertaken efforts, extra analysis tables will be implemented to reinforce tracking and detection the various waste sources.

Hazardous waste :

- Hazardous waste : management through a waster database

- Project « Adhesives, mastics, ... production »

Wastes will be limited to empty raw material packaging and to equipment maintenance waste (scrap iron, cloth, used oil...). All these wastes will be collected by a certified company for the collection and treatment of dangerous wastes.

2009 / 2010		
DONE		
DONE		
DONE		
DONE		
2009 / 2010		

Ground and underground

- 100 % Valorisation RM recovered on the storage yard
- Inert 1 x 10.000 lit. tank containing light fuel oil. This choice is motivated by our will to switch over to natural gaz.

- Project « Adhesives, mastics, ... production »

All the exploitation zones of the site are waterproofed and storage zones for dangerous goods or wastes will have to meet regulations related to localisation, filling/emptying conditions, stability and solidity conditions, protection against corrosion, watertightness, safety device against over /under pressures, earthing...)

Noise

A new itinerary and access plan for incoming/leaving trucks will be implemented so as to avoid trucks in the inhabited area (for the whole site)

Energy

- The main improvements will bear onto gaz conversion of the equipment of the site and to replacing or improving energy consuming devices.
- Reorganize blend preparation unit 1
- Reorganize blend preparation unit 2
- Transfer line 3 to production unit 1
- Hot Treatment of defibered material

Actions in case of emergency

Capacity to react in case of accidental pollution of waste waters :

- Application of preventive emergency procedures
- Adapt prevention emergency procedures to the « adhesives, mastics,... production »

DONE		

2009 / 2010		
DONE		
Running		
DONE		
2009 / 2010		

Measures & controls

Analyse results in view of the requirements for each field listed below

- Disposal of waste waters
- Fumes washing installation
- Noise in the close neighbourhood of the cy
- Dust hoovering installation
- Forklift truck washing station + hydrocarbon separator
- Flow measurement in the pipings
- Adapt control procedures to « Adhesives, mastics...production » project

ISO14001 – EMAS Certification

- Adapt the environmental handbook and all the procedures to the « adhesives, mastics... production » project

Environmental Audits

- follow up of the audit planning + corrective actions
- Integrate the « adhesives, mastics, ...production » project in the audit planning

= realisation period

DONE		
DONE		
DONE		
DONE		
DONE		
		2009 / 2010
		2009 / 2010
DONE		
		2009 / 2010

Definitions

Cov	Volatile Organic Compounds
Cox	Organic Compounds based on Carbon oxides
Nox	Organic compounds based on Nitrogen oxides
Sox	Organic compounds base on Sulfuric oxides
Code NACE	Sector of activity code
PME	Small or middle sized company
EMAS	European Environmental Regulation
ISO 14001	International Environmental standards
SME	Environmental Management System containing all the documentation related to Environmental care
TA-Luft	German regulation about atmospheric emission
LCA	Life Cycle Assessment

Lost packaging = Packaging thrown away

For the technical terms of our products, refer to the technical data sheets.

Please contact :

Environmental Department
Responsible : T. Placucci
Address : Parc Industriel 1360 Perwez

Tel : 081/65.43.15 Fax : 081/65.43.06 E.mail : tpl@Derbigum.com

CONTROLLER REPORT

Based on the documentatin, data and information resulting from the company's internal procedures examined during the control, Mr Bureau Veritas Certification (certification n° BE-V-0022), declares the environmental management system, the environmental policy, programme and Declaration meet the EMAS II requirements (according to Europeean rules n°761/2001du 24/04/2001).

The Environnemental Controller
Bureau Veritas Certification

The next environmental declaration is scheduled for 2010.