

Annex 1

Examples of international environmental guiding principles

Guiding principles are formal declarations that express the basis on which an environmental policy can be built and which provide a foundation for action.

A. The Rio Declaration on Environment and Development

The United Nations Conference on Environment and Development, having met at Rio de Janeiro from 3 to 14 June 1992, reaffirming the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972, and seeking to build upon it, with the goal of establishing a new and equitable global partnership through the creation of new levels of co-operation among States, key sectors of societies and people, working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system, recognizing the integral and interdependent nature of the Earth, our home proclaims that:

Principle 1

Human beings are at the center of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

Principle 2

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 3

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Principle 4

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Principle 5

All States and people shall co-operate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

Principle 6

The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

Principle 7

States shall co-operate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they demand.

Principle 8

To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

Principle 9

States should co-operate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies.

Principle 10

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

Principle 11

States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries can be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

Principle 12

States should co-operate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

Principle 13

States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also co-operate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Principle 14

States should effectively co-operate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.

Principle 15

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Principle 16

National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Principle 17

Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Principle 18

States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

Principle 19

States shall provide prior and timely notification and relevant information to potentially affected States on activities that can have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.

Principle 20

Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Principle 21

The creativity, ideas and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

Principle 22

Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interest and enable their effective participation in the achievement of sustainable development.

Principle 23

The environment and natural resources of people under oppression, domination and occupation shall be protected.

Principle 24

Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and co-operate in its further development, as necessary.

Principle 25

Peace, development and environmental protection are interdependent and indivisible.

Principle 26

States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

Principle 27

States and people shall co-operate in good faith and in a spirit of partnership in the fulfillment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

B. International Chamber of Commerce (ICC) Business Charter for Sustainable Development

1. Corporate Priority

To recognize environmental management as among the highest corporate priorities and as a key determinant to sustainable development; to establish policies, programs and practices for conducting operations in an environmentally sound manner.

2. Integrated Management

To integrate these policies, programs and practices fully into each business as an essential element of management in all its functions.

3. Process of Improvement

To continue to improve policies, programs and environmental performance, taking into account technical developments, scientific understanding, consumer needs and community expectations, with legal regulations as starting point; and to apply the same environmental criteria internationally.

4. Employee Education

To educate, train and motivate employees to conduct their activities in an environmentally responsible manner.

5. Prior Assessment

To assess environmental impacts before starting a new activity or project and before decommissioning a facility or leaving a site.

6. Products or services

To develop and provide products or services that have no undue environmental impact and are safe in their intended use, that are efficient in their consumption of energy and natural resources, and that can be recycled, reused, or disposed of safely.

7. Customer Advice

To advise, and where relevant educate, customers, distributors, and the public in the safe use, transportation, storage and disposal of products provided; and to apply similar considerations to the provisions of services.

8. Facilities and Operations

To develop, design and operate facilities and conduct activities taking into consideration the efficient use of energy and materials, the sustainable use of renewable resources, the minimization of adverse environmental impact and waste generation, and the safe and responsible disposal of residual wastes.

9. Research

To conduct or support research on the environmental impacts of raw materials, products, processes, emissions, and wastes associated with the enterprise and on the means of minimizing such adverse impacts.

10. Precautionary Approach

To modify the manufacture, marketing, or use of products or services or the conduct of activities, consistent with scientific and technical understanding, to prevent serious or irreversible environmental degradation.

11. Contractors and Suppliers

To promote the adoption of these principles by contractors acting on behalf of the enterprise, encouraging and, where appropriate, requiring improvements in their practices to make them consistent with those of the enterprise; and to encourage the wider adoption of these principles by suppliers.

12. Emergency Preparedness

To develop and maintain, where significant hazards exist, emergency preparedness plans in conjunction with the emergency services, relevant authorities and the local community, recognizing potential transboundary impacts.

13. Transfer of Technology

To contribute to the transfer of environmentally sound technology and management methods throughout the industrial and public sectors.

14. Contributing to the Common Effect

To contribute to the development of public policy and to business, governmental and intergovernmental programs and educational initiatives that will enhance environmental awareness and protection.

15. Openness to Concerns

To foster openness and dialogue with employees and the public, anticipating and responding to their concerns about potential hazards and impacts of operations, products, wastes or services, including those of transboundary or global significance.

16. Compliance and Reporting

To measure environmental performance; to conduct regular environmental audits and assessments of compliance with company requirements, legal requirements and these principles; and periodically to provide appropriate information to the Board of Directors, shareholders, employees, the authorities and the public.

Annex 2

Examples of overseas environmental policy

Bass Group – selected example for hotels and restaurants sector

(Extracted from Bass Group : “The Environment Matters”, 1998, p.2)



Bass Group Environmental Policy

With major hotel, leisure retailing and branded drinks activities around the world, Bass recognizes that it faces a wide range of environmental responsibilities.

Bass is committed to a policy of seeking continual improvement in environmental matters. Group companies have introduced environmental management programmes which will deliver regulatory compliance in each country, commercial efficiency and good environmental citizenship. These programmes are an integral part of the proper management of Group businesses and will help provide a safe and healthy environment for employees, contractors, customers and neighbors.

Bass will ensure that Group companies:

- *undertake a thorough risk and hazard analysis;*
- *are sensitive to environmental issues and consider their potential impact in all new projects and developments;*
- *implement their company environmental policies;*
- *have management accountability and responsibility for environmental matters;*
- *develop management programmes and set quantified targets where appropriate;*
- *monitor and report on performance on a regular basis;*
- *communicate with those affected by their actions; and train and involve employees at appropriate levels and functions within the organization.*

September 1997

Tarmac Group – selected example for construction sector

(Extracted from Tarmac Group : “Environment Report 1998/1999”, p.1)



Tarmac Group Environment Policy

Tarmac is committed to achieving world class performance in environmental practice and the development of solutions to improve the built environment. The Group has a responsibility for the impact of its operations on local communities and the natural environment. It is committed to minimizing their effects, both on its own and in partnership with others.

Tarmac's approach is based on achieving and reporting continuous improvement in environmental performance. Its Independent Environmental Advisory Panel monitors progress.

The implementation of this policy reflects the varying activities of the company in specific industry sectors, including:

- *Meeting all legal requirements, regulations and standards of the country of operation, and monitoring to ensure compliance.*
- *Endeavouring to minimize the environmental impact of operations, and reduce the effects of noise, dust, disturbance and inconvenience as far as practicable.*
- *Demonstrating efficient use of energy, water and raw materials, taking appropriate opportunities to minimize waste and to re-use or recycle.*
- *Working to improve the standards of the sectors in which the company operates, enhancing environmental awareness and commitment amongst staff through structured training, and encouraging the adoption of sound environmental principles amongst contractors, suppliers and customers alike.*
- *Responding positively to the environmental developments in each business area by review of such issues with the appropriate authorities, the local communities and other bodies.*
- *Reporting the key environmental impact of operations, the improvements achieved and targets for the future.*

Adopted 1994

Annex 3

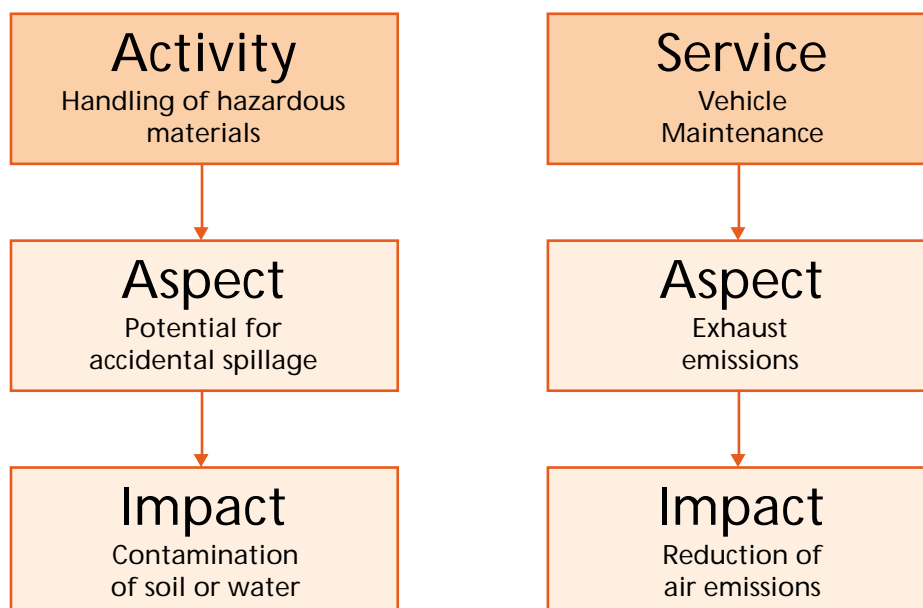
Steps to identify the environmental aspects and the associated impacts

The environmental impacts of an organization refer to the changes which take place in the environment as a result of the activities and services of the organization. For example, an activity of handling of hazardous materials, which has potential for accidental spillage, may have an environmental impact on contamination of soil or water.

The identification of significant environmental impacts can be dealt with the following three steps:

1. Among the activities and services, select those which are large enough for meaningful examination and small enough to be sufficiently understood.
2. Identify as many environmental aspects as possible associated with the selected activities or services. (Note: an environmental aspect refers to an element of the organization's activities and services which can have a beneficial or adverse impact on the environment.)
3. Identify as many actual and potential environmental impacts as possible associated with each identified aspect.

Examples from the three steps above are shown as follows.



Annex 4

Checklist of key environmental impacts for organizations

Potential Environmental Impacts	Offices / Facilities managed	Operational activities	Planning & execution of services	Other activities
Energy consumption				
Materials/ resources use				
Water consumption				
Air emissions				
Water discharges				
Noise impact				
Waste management				
Hazardous waste management				
Contamination of land				
Accidental releases				
Compliance with laws and regulations				
Others				

To complete this checklist, please :

- if there is environmental impact
- if there is no environmental impact
- if you are uncertain and further investigation is required

Annex 5

Examples of environmental targets and milestones

Environmental Aspects / Environmental Indicators	Long Term Target / Milestone	Short and Medium Term Target / Milestone
Energy and Resource Use		
Reduction in water consumption as compared to 1998 level	30%	Year 1: 10% Year 2: 20% Year 3: 30%
Reduction in electricity consumption as compared to 1998 level	15%	Year 1: 5% Year 2: 10% Year 3: 15%
Paper consumption	Kept within 1,000 reams / year from 2004	Year 1: within 1,500 reams Year 2: within 1,200 reams Year 3: within 1,000 reams
Usage of timber in construction sites	Within 500 tonnes/year	Year 1: within 1,000 tonnes Year 2: within 900 tonnes Year 3: within 800 tonnes
Pollution Prevention: Emissions		
Removal of asbestos containing material from the buildings/ facilities	All by 2007	Year 1: 40% removed Year 2: 50% removed Year 3: 60% removed
Reduction in Biochemical Oxygen Demand level of the effluent from the laboratories as compared to 1998 level	0%	Year 1: 20% Year 2: 40% Year 3: 50%
Total Suspended Particulates measurements for construction sites meeting the Air Quality Objectives (AQO)	90% of data meeting AQO	Year 1: 70% Year 2: 85% Year 3: 90%
Installation of control system to minimise emission of Volatile Organic Compounds to ambient air from facilities	Completed by 2004	(N/A)
Pollution Prevention: Waste		
Reduction in solid waste generation as compared to 1998 level	50%	Year 1: 10% Year 2: 20% Year 3: 30%
Implementation of waste recovery scheme for buildings under management	All (200 nos.) buildings by 2010	Year 1: 10 buildings Year 2: 30 buildings Year 3: 50 buildings
Beneficial use of biosolids	90%	Year 1: 50% Year 2: 75% Year 3: 90%
Development of waste minimization guidelines for construction projects	Completed by 2003	Year 1: (N/A) Year 2: (N/A) Year 3: completed
Environmental Management		
Development of an Environmental Management System in accordance with the ISO 14001	By 2005	(N/A)
Completion of an internal Environmental Management System Manual for guiding the environmental management work	(N/A)	Year 1: (N/A) Year 2: completed Year 3: (N/A)
Establishment of Green Action Team at each division to follow up on green measures	All by 2007	Year 1: 2 teams Year 2: 3 teams Year 3: 4 teams
Environmental Audits for different offices of the bureau or department	10 audits/year	Year 1: 2 audits Year 2: 6 audits Year 3: 10 audits
Operations or Services		
Population benefited or protected by environmental measures implemented	100%	(N/A)

Environmental Aspects / Environmental Indicators	Long Term Target / Milestone	Short and Medium Term Target / Milestone
Purchasing and Contracting		
Procurement of recycled paper	50% of total paper purchased	Year 1: 30% Year 2: 50% Year 3: 50%
Documentation and implementation of environmental procurement criteria for tenders	All tenders from 2004	Year 1: 50% Year 2: 70% Year 3: 90%
Proportion of low-pollution-emission vehicles in the fleet used by the bureau or department	100% by 2006	Year 1: 70% Year 2: 80% Year 3: 90%
New equipment purchased which are models of recognized high standards of energy efficiency	100%	Year 1: 50% Year 2: 90% Year 3: 100%
Education and Training		
Environmental awareness or similar training for employees	Cumulative 200 staff trained by 2006	Year 1: cumulative 40 staff Year 2: cumulative 80 staff Year 3: cumulative 120 staff
Establishment of Green Citizenship program for motivating employees to adopt green practices in the workplace	Established by 2003	Year 1: (N/A) Year 2: (N/A) Year 3: Established
Development of a package of green practice guidelines for staff	(N/A)	Year 1: (N/A) Year 2: completed Year 3: (N/A)
Sponsorship on environmental protection campaigns	Cumulative HK\$5 million by 2005	Year 1: HK\$1 million Year 2: HK\$1 million Year 3: HK\$1 million
Compliance		
Comply with Air Pollution Control Ordinance	100%	(N/A)
Comply with Water Pollution Control Ordinance	100%	(N/A)
Meet the noise criteria in Environmental Guidelines for Planning in Hong Kong	100%	(N/A)
Communication		
Reporting the environmental performance on website	By 2002	Year 1: (N/A) Year 2: Implemented Year 3: (N/A)
Environmental related talks and exhibitions participated/organized	10 numbers/year	Year 1: 10 numbers Year 2: 10 numbers Year 3: 10 numbers
Publish a consultation paper on environmental protection	(N/A)	Year 1: completed Year 2: (N/A) Year 3: (N/A)
Environmental Expenditure		
Expenditure on construction of traffic noise barriers for residential buildings	HK\$10 million/year	Year 1: HK\$8 million Year 2: HK\$10 million Year 3: HK\$10 million
Spending on sewerage infrastructure development works	Cumulative HK\$10 billion by 2006	Year 1: HK\$1 billion Year 2: HK\$3 billion Year 3: HK\$2 billion
Trees planted	300 numbers/year	Year 1: 200 numbers Year 2: 300 numbers Year 3: 300 numbers
Spending on environmental improvement programmes	Cumulative HK\$500 million by 2006	Year 1: HK\$100 million Year 2: HK\$100 million Year 3: HK\$100 million

Annex 6

Examples of analysis of environmental performance

Policy	Objective / Target	Reported Information
Energy and Resource Use		
We will manage and protect our renewable resources to ensure sustained yield and multiple use.	Reduce the percentage of original natural material required in packaging by 50%	<p>A team was established to ensure that packaging practices are state-of-the-art in terms of design, materials and waste minimization.</p> <p>Original natural material in packaging was reduced by 55% by switching from cardboard with 30% recycled material to 70% recycled material for our packaging and reducing the number of cardboard dividers in the package. This project has reduced packing waste by approximately 6 tonnes annually and reduced packaging costs by \$XX.</p>
We will minimize the intrusion on the environment to recover non-renewable resources and restore sites to their original condition.	Establish a facility that recovers non-renewable resources from existing products.	The department processed over YY tonnes of recyclable material containing base and precious metals. We are also working closely with our contractors to recycle used durable products that currently go to landfill sites.
We will minimize energy consumption in operations.	Reduce electricity consumption by 10% and gas consumption by 6%.	<p>We fell short of our goal due to unforeseen power outages and shutdowns, and new equipment start-ups. We expect new energy efficient projects, however, such as the co-generation facility at Site M, to put us back on target.</p> <p>Energy management programs resulted in emissions reductions of YY tonnes of carbon dioxide.</p>
	Refurbish the office lighting, heating and cooling systems to reduce energy consumption.	A new office lighting system reduced energy consumption by YY and saved the company \$XX.
Pollution Prevention		
We will minimize discharges and emissions of contaminants to air, water and land arising from our laboratory operations.	Reduce air emissions (of substance X) by 10% from prior year.	Tonnes of substance A released in air emissions – this year and last year.
	Reduce water discharges (of substance Y) by 6% from prior year.	Tonnes of substance B discharged in effluents – this year and last year.
	Build a new water treatment plant to treat water before it is discharged in the environment at Laboratory A.	New water treatment plant, costing \$XX, was put into operation during the year, removing an additional YY tonnes of substance C prior to discharging the water back into the environment.
We will promote reuse, recycling and by-product recovery and disposal of remaining wastes will be done in an environmentally safe manner.	50% of the construction materials will be packaged in reusable containers or in recyclable materials.	Redesigned transport packaging for re-use reducing waste by XX tonnes. Equipment is being installed to increase the content of old corrugated containers to 100%.
We will search for technology to reduce and eliminate waste from our operations.	Establish a waste elimination team to investigate best available technologies.	The company established a waste elimination team during the year. A survey was developed and sent to all operating units to gather information about the technology, used and materials and energy efficiency. The team will analyze results and make recommendations in the coming year.
Scientific and technological innovation will be supported to enhance environmental and economic well-being.	Commit \$XX to research and development activities to design products that can be reused, recycled or safely disposed of.	Our research and development efforts have largely focused on environmental issues directly related to product design. During the year, the bureau/department worked on two main projects, at a cost of \$XX.
		Laboratory A was used to test a new method for removing contaminants from plastic waste. The recomposed material is used at Facility B. The net savings are projected at \$XX per year.

Policy	Objective / Target	Reported Information
Environmental Management		
We will conduct operation audits on a regular basis and initiate action plans, where required, to ensure compliance with the company environmental policy and government regulations.	Conduct 5 site audits each year.	Audits are performed at all major facilities and operations at least once every three years. Five audits were completed in the past year in accordance with our plans. Audit results were reviewed with location management and action plans developed to address all deficiencies. Progress against plans is reviewed on a regular basis.
Operations or Services		
We will determine the potential environmental liabilities of a property or land being developed.	All property and land developed will be subject to an environmental assessment where appropriate.	The company has budgeted a total of \$XX annually for 6 years, which can only be used to pay for environmental assessments.
We will identify activities and developments that are harmful or potentially harmful to people and the environment with alternatives that minimize social and ecological costs over their life-time.	Establish management processes to introduce environmental analyses and maintain awareness of evolving best practices in new services or operation.	The xxx job responsibilities were revised to include a review of the environmental impact of new services or operations and to explore possibilities for reducing any harmful effects.
Purchasing and Contracting		
We will expect high environmental standards from our suppliers.	Develop a package containing information about the bureau or department's environmental and purchasing policies and send it to all major suppliers.	Suppliers information package sent to 150 major suppliers.
Education and Training		
We will develop understanding among all employees of their responsibilities and assign the necessary authority.	Increase employee and management participation in training and workshops by 5%. Develop introductory and advanced training courses.	More than 2000 employees participated in environmental awareness and training sessions. This brings the total training coverage in the last three years to 80% of the workforce, up from 63% last year. A general environmental awareness program was developed and presented to all personnel at all plant locations. An advanced training program was developed and presented to all managers with plant level responsibility for complying with environmental policy and legislative requirements. Workshops were held with drivers to discuss emergency response programs and legislative requirements in the event a spill occurs when product is in transport.
Compliance		
We will conduct all construction activities in a manner which places a premium on effective planning, careful monitoring and timely mitigation.	Conduct regular inspections at all sites. Develop a detailed plan for dealing with environmental accidents and emergencies at Site A and Site B.	Regular inspections were conducted at all sites. Emergency response plans and a crisis management team has been established at Site A and Site B. Emergency response drills took place to ensure staff were familiar with the new procedures.
We will comply with environmental laws and regulations laws and regulations at all times and in the event of difficulties these will be reported to the regulatory authorities without delay.	Achieve 100% compliance with environmental laws and regulations.	Five water discharge locations were 100% in compliance in 19XX. Four other had compliance levels averaging between 95-100%. All these operations have corrective action plans in place. Six spills of untreated water occurred due to pump failures. More pumps have been added to increase the water handling capacity of the water treatment system.
Communication		
We will report regularly to our directors on our environmental status.	Present a quarterly report to the directors on environmental status and significant findings from the environmental audit program.	Quarterly reports were presented to the directors by the Green Manager. Significant items requiring the directors' attention included the impact of proposed regulation X on activity Y and programme C.
We will communicate openly about our environmental policy, practices and performance.	Prepare an environmental report for public distribution annually.	This is our third year in which we have reported on environmental performance in a separate publication. This report is used to inform our staff, suppliers, and the community in which we operate about our commitment to the environment and how we are fulfilling that commitment.
We will keep the facilities open to our community and involve them in plant operations.	Nominate an environmental contact person at all operational sites. Establish a community advisory panel for the facilities.	Further information on each site can be obtained by contacting the people listed at the end of this report. A community advisory panel was established and is composed of school board and police representatives, as well as other interested individuals in the community.

Annex 7

Summary table

	Offices / facilities managed	Operational activities	Planning & execution of services	Other activities
Environmental impacts.	1. 2. 3.			
Targets / Milestones	1. 2. 3. 4.			
Key environmental performance results	1. 2. 3. 4. 5. 6.			
Action plans to address some key performance areas	1. 2.			

