Environment Canada Environnement Canada

Assessing Creditworthiness:

Baseline Survey of Environmental Information Required by Lending Institutions in Atlantic Canada

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Abstract

The past decade has seen an increasing trend in the expansion of lender liability into new environmental laws in Canada. As such, exposure to a customer's environmental risks is a significant concern for lending institutions who may be held liable for substantial clean-up costs which far exceed the risk of default by the borrower.

To understand how lenders are addressing this concern, Environment Canada conducted a baseline survey of financial institutions in Atlantic Canada in order to:

a) assess what mechanisms are being implemented by lending institutions in order to minimize their exposure to a potential client's environmental risk; and,

b) determine whether the potential exists to promote pollution prevention as an essential element in the assessment of creditworthiness by lenders.

A total of sixteen (16) lending institutions were requested to participate in the survey. The structure of the interview was such as to allow interviewees to describe the procedure which an Accounts Manager would normally follow upon request for credit from a commercial enterprise. Following this discussion, interviewees were asked to describe how their particular institution determined the extent of a company's potential environment-related liabilities and costs.

The report describes the procedures currently utilized by participating institutions in incorporating environmental information in an assessment of a potential client's creditworthiness and outlines a generic set of best-practiced tools which may be used by lending institutions to minimize their exposure to a customer's environmental risk. The report also identifies an opportunity for both Environment Canada and lending institutions to promote pollution prevention approaches amongst their clientele, recognizing the constraints which environmental legislation places on interference by banks in the management of a business. A second opportunity identified in the report requires Environment Canada to play a key role in encouraging publicly-funded lending institutions to add the element of pollution prevention as an essential criterion in decision making affecting loan approvals.

Table of Contents

1.0 Introduction

The enactment of the first national legislation dealing specifically with the environment in the early 1960s by the United States signaled the beginning of a global proliferation of environmental statutes aimed at the protection of the environment. Over the past three decades, instruments used by governments to control the impacts of pollution on the environment have ranged from the traditional "command and control" regulatory instruments to the more recently adopted non-regulatory types, including economic instruments and those promoting non-mandatory, pollution prevention approaches.

While it is not the purpose of this report to present the case for choosing one form of policy instrument over another or to suggest an appropriate mix, it is important to note that, according to the OECD[1], the world's most advanced countries are developing, implementing and modifying environmental policies in the absence of a clear understanding of how far, and in what way, they actually achieve the required reduction in emissions or environmental damage, in accordance with the stated objective of the chosen policy. This absence of clear evidence on the environmental effectiveness, economic efficiency, administrative and compliance costs and wider economic effects (such as competitiveness, economic growth, employment and rate of innovation) of such policies has provided cause for concern among institutions and businesses.

One such regulatory instrument that has received considerable attention over the past decade, particularly among financial institutions, concerns the imposition of civil and criminal liability for a wide range of activities that cause environmental damage. Both in Canada and the United States, exposure to a client's environmental risk can result in lender liability for substantial clean-up costs which far exceed the risk of default by the borrower and/or the value of the credit extended. This potential for exposure to a customer's environmental risks is a significant concern for lending institutions as current environmental law places liability on persons *responsible* for a source of contamination while existing judgments as to what precisely constitutes responsibility remain unclear and even contradictory.

[1] OECD 1997. *Evaluating Economic Instruments for Environmental Policy*. OECD, Paris, France, pp. 141.

Additional information for readers on the subject of environmental liability as it relates to lending institutions is provided in **Appendix A**.

2.0 Purpose of the Study

With the continued expansion of lender liability in new environmental laws in Canada, the purpose of this study by Environment Canada is:

a) to assess what mechanisms are being implemented by lending institutions in order to minimize their exposure to a potential client's environmental risk; and,

b) to determine whether the potential exists to promote pollution prevention as an essential element in the assessment of creditworthiness by lenders.

3.0 Rationale for the Study

3.1 Current Policy Environment

There is a growing body of evidence which suggests that past environmental policies, wich focused principally on managing and controlling the release of pollutants via regulation, have demonstrated limited success. As such, the Pollution Prevention Section saw an opportunity to investigate the potential of using pollution prevention approaches as one of several mechanisms for addressing the environmental and economic issues associated with lenders' exposure to environmental risks. This approach is elaborated in the Federal Pollution Prevention Strategy[2] and is seen to be in the best interests of all concerned (lender, government and borrower) in that it aims at minimizing environmental risk by eliminating the causes of pollution rather than treating its symptoms. It should also be noted that pollution prevention is now a key principle incorporated into the proposed revisions[3] for the *Canadian Environmental Protection Act (CEPA)*.

In order to direct its pollution prevention efforts in a targeted manner to both lending institutions and businesses seeking credit, it became evident that Environment Canada needed to have a clear understanding of the method of collection, type and level of environment-related information which lending institutions in Atlantic Canada were

[2] Government of Canada. 1995. *Pollution Prevention: A Federal Strategy for Action*. Ottawa, pp.12.

requesting in order to assess creditworthiness. Access to this baseline data by Environment Canada would serve to complement two previous studies undertaken in 1996 by the Pollution Prevention Section (Atlantic Region) and which targeted the business community and government business counsellors respectively.

The first[4] of these two earlier studies revealed that most small and medium-sized businesses in the Atlantic Region possessed a relatively low level of awareness and understanding of environmental issues. Thus, any increasing demand for environment-related information from lenders would require an effective awareness effort if borrowers are to first understand the rationale behind the lenders' request and secondly, to effectively address the environmental concerns highlighted and requested by the lenders.

The second study[5], conducted in June 1996, focused on increasing the ability of economic and environment agencies to motivate and assist businesses to improve both their environmental and business performance. Participants at a workshop related to this study provided a total of 26 recommendations for future action and assisted in the development of an ***Environmental Issue Scoping Checklist for Business Counsellors*** in public agencies (**Appendix B**).

3.2 Economic Aspects

Companies have been shown to benefit both tangibly and intangibly from investing in prevention-based measures[6]. Tangible benefits accrue as a result of direct cost savings (e.g. in raw materials, production labour, compliance costs, waste disposal and transportation) and indirect cost savings (e.g. by reducing special handling and storage requirements, hazardous materials training, paperwork associated with permitting of toxic material and insurance expenses related to storage of flammable or hazardous materials). Similarly, intangible benefits have been shown to include:

- reduced long-term liability risks associated with toxic material use and disposal;

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[3] Tabled before the House of Commons, March 12, 1998 by the Honourable Christine Stewart.
[4] Environment Canada. 1996a. *Environmental Management Information and Training for Small and Medium-Sized Enterprises*.
[5] Environment Canada. 1996b. *Business and Environment: The Bottom Line. Training Workshop for Business Advisors and Environment Staff, Final Report*.

- improved public image and relationship with local communities;
- new potential to take advantage of "green market" trends;
- improved employee health and safety; and
- reduced relevant regulatory requirements.

Additionally, recent evidence[7] suggesting a strong correlation between a company's environmental performance with its performance on the stock market is suggesting that strategic environmental management does in fact enhance competitiveness, profitability and share-holder value - a point that capital markets will be forced to recognize in their assessment of overall performance of individual businesses.

4.0 Methodology

A total of sixteen (16) lending institutions in the Atlantic Region, as well as the Canadian Bankers Association (CBA), were contacted by letter to request agreement on taking part in the study (Table 1). This initial solicitation was followed up with telephone calls to the recipients to arrange an appropriate time for a personal interview.

[6] NEWMOA. 1996. *Pollution Prevention and Profitability: A Primer for Lenders*. 1996, pp.12.
[7] Kieran, M.J. and Levinson, J. 1997. *Environment Drives Financial Performance: The Jury is In*. Environmental Quality Management. 1997.

Table 1. Potential Survey Participants

7 Chartered Banks in each of the four Atlantic provinces Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Hong Kong Bank of Canada[8] National Bank of Canada Royal Bank of Canada Toronto Dominion Bank
2 Credit unions Credit Union Atlantic Heritage Credit Union
2 Trust companies Canada Trust Company Co-Operative Trust Company
3 Federal agencies Business Development Bank of Canada Atlantic Canada Opportunities Agency Farm Credit Corporation
2 Provincial agencies NS Business Development Corporation NS Investment and Trade

In-person interviews were conducted with seven (7) of the institutions and telephone interviews with another three (3). A meeting was also arranged with a representative of the Canadian Bankers Association. In the case of the telephone interviews, information which the institutions were at liberty to send to Environment Canada was also requested.

[8] There are no branches in PEI at the time of the study.

The structure of the interview was such as to allow interviewees to describe the procedure which an Accounts Manager would normally follow upon request for credit from a commercial enterprise. Following this discussion, interviewees were asked to describe how their particular institution determined the extent of a company's potential environment-related liabilities and costs. Questions illustrating the type and level of information solicited from interviewees are provided in Table 2A and 2B.

Table 2A. Information Relating to Tangible Indicators

Does the financial institution collect information on the following tangible indicators relating to a firm's environmental issues?

1. ***Regulation***:
   - Is the company in compliance with regulations?
   - Can it afford to comply with foreseeable future mandatory requirements?
   - What would be the costs of failure to comply?

1. ***Finance***:
   - Has the company made adequate provisions for environmental liabilities?
   - Is it insured against environmental risk?
   - Is it able to pass environmental costs onto customers or must it absorb them itself?

1. ***Legal Action***:
   - Has it been involved in environmental lawsuits? If so, what might be the outcome?

1. ***Management***:
   - Does the company have an environmental policy ?
   - Is it adequately implemented?
   - Does the company conduct environmental audits? Has it acted on the findings?

1. ***Reputation***:
   - What is the company's environmental reputation?
   - Has its products ever been boycotted?
   - Does the company care about its environmental image?

Table 2B. Information Relating to Intangible Indicators

Does the financial institution collect information on the following intangible indicators relating to a firm's environmental issues?

1. ***Quality Management***:
   - Is management aware of environmental vulnerabilities?
   - Has it anticipated problems and trained staff to deal with them?

1. ***Strength of environmental policy***:
   - Is the policy robust?
   - Does it ensure that environmental matters are adequately taken into account in decision-making?

1. ***Operating environment***:
   - What is the relationship of the company with regulators?
   - Is there a high level of regulatory and legal uncertainty?
   - Is the sector frequently subject to political or public controversy?

5.0 Results

1. Agreement to participate in the study was obtained from ten (10) of the sixteen (16) institutions contacted (Table 3). This represented a response rate of 62.5%.

Table3. Breakdown of Actual Survey Participants

Institution-type	Method of interview	Percent of total surveyed	Fraction contacted
Chartered banks	In-person	60%	6 of 7
Trust companies	Telephone	10%	1 of 2
Credit unions	In-person	10%	1 of 2
Federal agency	Telephone	10%	1 of 3
Provincial agency	Telephone	10%	1 of 2

2. All of the respondents screen potential commercial applications for environment-related information. This screening is motivated by a concern for lender liability (particularly in the case of non-governmental institutions) and the need to assess all aspects of credit risk. The type of information collected fell into three possible categories, each with increasing levels of detail.

Table 4. Type of Information Collected by Lending Institutions

	Category 1 Compliance Information/ Phase I Site Assessment	Category 2 Pollution Control Information	Category 3 Environmental Management and Pollution Prevention Information
Number of institutions surveyed	10	7	5
Percent of institutions surveyed	100%	70%	50%

As shown in Table 4, all ten (10) of the participants required information relating to compliance with pertinent regulations, and a Phase I Site Assessment (Category 1) for environmentally-risky businesses and loans in which real property is taken as security. For two (2) of the institutions surveyed, if a Phase I Site Assessment indicated a potential environmental risk, the loan application was rejected. Thus it was the policy of 20% of the institutions surveyed not to extend credit to environmentally-risky businesses. Seven (7) institutions required specific information on the pollution control mechanisms implemented by the loan applicant in making a decision regarding creditworthiness (Category 2). Five (5) of these seven (7) institutions also collected information relating to environmental management and pollution prevention approaches practiced by the applicant (Category 3). It is worth noting however that the degree of detail with respect to environmental management information and pollution prevention approaches differed considerably among these institutions. For example, one (1) of the lenders only required information regarding the presence of an environmental policy while another required information on whether an Environmental Management System (EMS) was in place and had been integrated into the activities of the business. Three (3) institutions required detailed data on the presence of emergency and spill control plans, a functional WHMIS system, and an EMS with internal auditing. One of these three lenders also requested information on all of the above as well as the community's perception of the applicant and corrective actions procedures for both internal and external complaints, while another identified the additional need to obtain information on the state of technology in use by the applicant. A detailed aggregated description of the types of information requested by the lending institutions who participated in the study is provided in Table 5.

Table 5. Aggregated Description of Environmental Information Required by Lending Institutions

Location and Site History	Environmental Compliance and Litigation	Environmental Control	Environmental Management and Pollution Prevention	Other Information
1) Historical use of property over the past 50 - 75 years. 2) Current and future use of property. 3) Type of water and sewer services.	1) Pertinent regulations. 2) Violation of permits. 3) Environmental orders or civil actions.	1) Contamination from neighbours. 2) Hazardous materials use, storage, disposal and transport. 3) Septic tanks, pits, lagoons. 4) Flammable material storage. 5) Underground and above ground storage tanks. - testing frequency, age, construction material, protective measure for containment. 6) Spills and accidents on site. 7) Presence of PCBs, asbestos, radon. 8) Soil, vegetation and surface and ground water conditions. 9) Air emissions and effluent discharge testing. 10) Noise, odour, dust, smoke and water quality complaints.	1) Environmental policy. 2) Internal auditing. 3) EMS. 4) State of technology in use. 5) Spill and emergency control response plans. 6) WHMIS system in place and maintained. 7) EMS integrated into all aspects of the business. 8) Resources and training support. 9) Identification of current and future environmental liabilities and corrective action 10) Community perceptions.	1) Names and addresses of oil supplier, contact at provincial DOE and environmental consultants used by company. 2) Plans for closure and/or decommissioning and associated costs. 3) Requests for site assessments over the past 10 years. 4) Identify any other properties owned by the applicant with environmental concerns, even if not part of loan application.

3. In all cases, direction on the level, type and method of collecting environment-related information among the lending institutions was obtained from headquarters and implemented on a national basis. The principal instrument for change which resulted in this demand for environment-related information was identified to be exposure to

lender liability and the regulator's ability to have a legal priority on security held by the lending institutions, in the event of the need to access funds for clean-up costs. As such, legal counsel played an important role in disseminating information on environmental risk and in influencing policies implemented by lending institutions.

4. Institutions in the survey demonstrated a range of methodologies in the collection of environment-related information from potential clients (Table 6).

Table 6. Methodologies Employed in Collecting Environment-Related Data

General loan application	**Environment-Related Questionnaire**		
2 of 10	8 of 10		
	Client filled-out questionnaire	**Accounts Manager filled-out questionnaire**	**Ranked against Account Manager's checklist**
	7	1	6 of 8

Two (2) or 20% of the institutions surveyed relied entirely on the information provided in the general loan application to determine creditworthiness and used the Phase I Site Assessment report to assess exposure to the borrower's environmental risk. Specific additional environment-related information was requested from the remaining eight (8) institutions. Seven (7) of respondents required potential borrowers to complete a specially-designed client questionnaire to gather information on the environmental aspects of the business for which the loan is being requested. One (1) of the participants obtained the information generally solicited on the client questionnaire through a process of interviews and site visits to the client's place of business, rather than asking the client to complete the questionnaire. Six (6) of the eight (8) participants who required that an environment-related questionnaire be filled out ranked this information against a manager's checklist to assess environmental risk and to determine whether information from environmental experts would be relevant to the decision-making process.

6.0 Findings - Summary of Best Practices

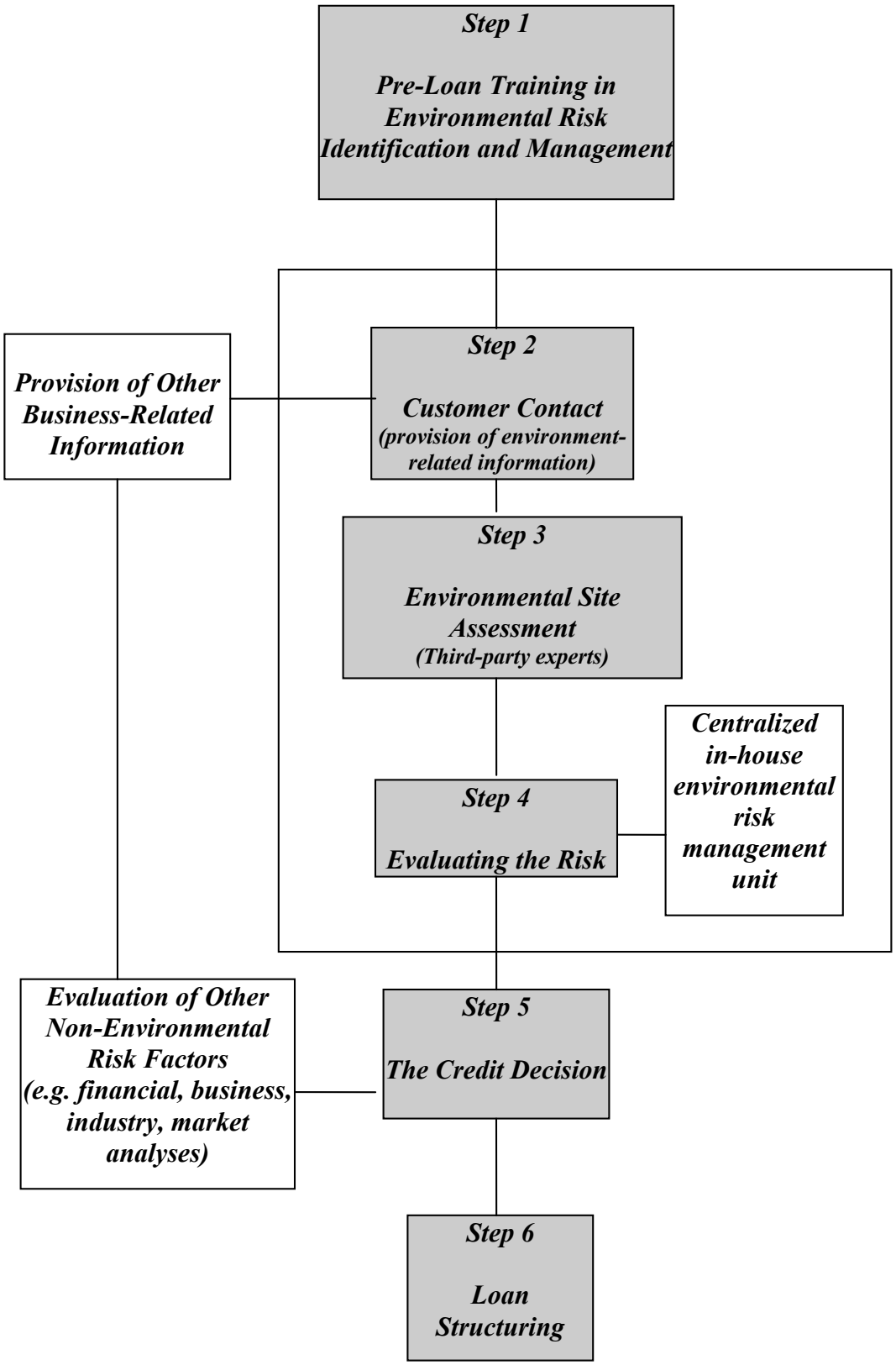
Based on the publicly-available and confidential information provided by the participants to Environment Canada during the course of this study, it has been possible to develop a generic set of best-practiced tools which lending institutions have utilized in their efforts to minimize their exposure to a customer's environmental risk. It must be stated that the institutions surveyed for this study have each developed a process to address this issue that currently meets their needs, some more conservative than others. For example, two (2) of the institutions have determined that the potential to be exposed to a customer's environmental risks exceed any potential for return on investment, one (1) requires only compliance with existing environmental regulations to proceed further with the loan application while another one (1) of the institutions have developed a centralized, national, in-house capability to advise on the environmental risks of potential clients, as well as using third-party environmental experts.

It is not the intent of this collection of best practices to suggest that Environment Canada is questioning the soundness of a particular institution's approach to the subject of lender liability and credit risk but rather to itemize a generic process which considers available aspects of minimizing environmental risk to the lender, borrower and public at large (Figure 1).

Step 1 - Pre-Loan Identification of Environmental Risk

Account managers and other senior-level decision-makers in the institution are provided with training in environmental risk management and are provided with industry-specific information that allows them to determine the role environmental risk should play in the loan decision. A matrix categorizing industries by their degree of environmental risk alerts front-line loan managers on the magnitude of the environmental issues associated with a potential client's industrial sector.

Figure 1: Reducing Lender Exposure to Environmental Risk



A ranking of the degree of severity of the risks resulting from: (i) air and water emissions; (ii) hazardous wastes; (iii) land and water contamination (including effluent discharge); and, (iv) catastrophic events associated with each of the industry sectors, is particularly helpful in identifying when the Account Manager may need external environment-specific expertise to further assess the risk.

Step 2 - Customer Contact

At this stage, the customer is asked to provide both environment-related and other business-related information. Obtaining environment-related information specific to a particular loan application provides the major source of input in the initial assessment of environmental risk. This information includes historical use of the property, site specifics, processes to be managed, regulatory requirements, compliance record of the applicant, etc. Regardless of whether the information is collected first from the client and subsequently ground-truthed by the lending institution or done jointly, accessing this level of detail is clearly enhanced by a visit to the site by the Account Manager. It is also at this stage that the Account Manager should explain to the borrower the rationale and benefits to both the lender and borrower of having a clear understanding of the environmental issues associated with the enterprise for which the loan is being requested. A third-party environmental site assessment, paid for by the borrower, may be commissioned at this stage.

Step 3 - Third-Party Assessment

Many lending institutions keep a listing of environmental engineers and consultants who are qualified to conduct environmental site assessments, to provide cost estimates for current and future liabilities and who would be considered expert witnesses by a court. Typically, site inspection reports contain detailed information on the history of usage of the site extending as far back as to its natural condition or fifty years of usage on the site, whichever is less. One institution surveyed required historical site activity information extending as far back as seventy-five years. Site characteristics, neighbourhood, materials in use, processes and operations, regulation and compliance, hazardous material use and storage and degree of contamination over the time period examined in the assessment are elaborated on in the report. To preserve “solicitor-client” privileges, these assessments are paid for by the borrower and distances the bank from any notion of control or

management of the property or business. Assistance on selecting qualified environmental practitioners for third-party site assessment may also be obtained from the appropriate provincial Department of Environment.

Step 4 - Evaluating the Risk

At this stage, the Account Manager consolidates all of the information gathered to identify the risks associated with the loan, summarizes the data and weighs key risks. For some of the larger lending institutions, a national, environmental risk management unit is available to the local offices if additional expertise is required. Based on this analysis, it should be determined whether the risk(s) can be eliminated, treated or managed, tolerated or transferred (e.g. by buying insurance). Integral to this analysis is an understanding of the environmental management of the operation. Information on the company's environmental policies and procedures, its commitment to training, allocation of resources to support the policies, compliance planning, commitment to internal and external communication of environmental practices, remediation and preventative action efforts, all provide valuable insight into management's ability to be proactive in combating environmental liabilities.

Step 5 - The Credit Decision

Information on the management of the business, industry information, financial information, market risks and environmental risks all contribute to a borrower's credit risk rating, which oftentimes take the form of a point score system. While environmental risk assessment is one of many factors determining a potential client's creditworthiness, it differs from the other factors important in the credit decision in that many of the approaches utilized in assigning a dollar value to environmental liability are fraught with uncertainty. A brief overview of the current approaches in valuing environmental risk is provided in Section III of **Appendix A**. The environmental risk assessment thus provides the Account Manager with the information helpful in determining whether the client is capable of managing the environmental affairs of the business in a manner that is acceptable to the lender, both from a borrower default and a lender liability perspective.

Step 6 - Structuring the Loan

In an effort to further limit the lender's exposure to a potential customer's environmental risk, loan documents may contain environmental clauses, warranties, covenants and

indemnifications, which attempt to absolve the bank from responsibility for certain actions taken on the part of the lender. Covenants such as the requirement for liability insurance, the development of in-house environmental policies and procedures, submissions of environmental reports at stated intervals, provision of alternate security and the requirement for periodic review of the loan may also form part of the loan structure. On-going monitoring by lenders is a critical element of the "due diligence" defence which may be applicable in the event of imposition of lender liability by a regulatory body. In a due diligence defence, the lender must demonstrate that it has followed every reasonable precautionary measure to prevent a breach from occurring[9].

7.0 Conclusion and Recommendations

7.1 Conclusion

The data collected in this baseline survey of lending institutions in the Atlantic provinces confirms the opportunity to promote pollution prevention techniques as a means of minimizing these institutions' exposure to environment liability. A targeted promotion at incorporating pollution preventive approaches into the credit decision can assist lending institutions to minimize exposure to environmental liability and borrower default while allowing businesses to enhance credit-worthiness. The extent to which financial institutions can contribute to the pollution prevention approach however must recognize the constraints which environmental legislation place on interference by banks in the management of a business. Thus, any attempt at lending institutions serving as vehicles for promoting pollution prevention approaches must be limited to the stages relating to the approval of the loan application.

[9] *R. v. The City of Sault Ste. Marie* (1978), 85 DLR (3rd) 161 (Supreme Court of Canada).

7.2 Recommendations

As cited by the World Business Council on Sustainable Development[10] and evidenced in this study, lending institutions have been preoccupied with the "down side" of the environmental challenge by implementing mechanisms to avoid liability for past and ongoing environmental damage caused by their clients. These mechanisms focus primarily on ensuring compliance with "command and control" type regulations and incur costs without necessarily eliminating future liability risks. This is typical of an environmental protection strategy which focuses on pollution control by treatment and/or disposal of industrial byproducts or wastes to the air, water or land. It results in high on-going costs for treatment, disposal and regulatory compliance and increased liability risks for any company that uses, transports or disposes of hazardous material and wastes. Such a strategy, from a lender's perspective, not only increases environmental liability risks but reduces creditworthiness since it reduces the amount of cash available to the borrower for repayment of the loan.

Recognizing and addressing this deficiency in control mechanisms is a critical step towards getting lending institutions to play a key supportive role in promoting the proactive approaches recommended in the Federal Pollution Prevention Strategy. Lenders who understand the basic principles and benefits of pollution prevention can be instrumental, at an early stage in the loan application process, in encouraging pollution prevention approaches in potential clients, with the resultant benefits of reduced liability and improved credit risk accruing to the lender, borrower and the environment.

Recommendation 1:

> *Under the constraints imposed on lending institutions by the regulations pertaining to lender liability, Environment Canada should seek to form partnerships with the Canadian Bankers Association and appropriate business organizations (e.g. Canadian Federation of Independent Business and the Alliance of Manufacturers and Exporters Canada) to actively promote the*

[10] Schmidheiny, S. and Zorraquin, F. 1996. *Financing Change: The Financial Community, Eco-Efficiency and Sustainable Development*. MIT Press, Cambridge, Massachusetts.

benefits inherent in the pollution prevention approach, including Environmental Management Systems, as the mechanism of choice for minimizing exposure to environmental risk by both borrowers and lenders.

This recommendation is consistent with approaches already endorsed by financial institutions in conducting their business in a manner that is consistent with the principle of sustainable development (**Appendix C**) and with the Business Charter on Sustainable Development developed by the International Chamber of Commerce (**Appendix D**).

Working in partnership with business and financial associations, Environment Canada can assist in increasing the awareness of the benefits of pollution prevention by encouraging lenders and borrowers to effectively address the following questions:

- Does the customer have a proactive approach to managing environmental risks and liabilities?
- Has the customer fully evaluated prevention opportunities?
- Does the proposed project reduce environmental liabilities and risk?
- Does the customer understand the potential savings that a waste minimization project can generate over a pollution control one, especially in environmental costs that are included in overhead?

Recommendation 2:

Given the requirement of federal government departments to develop and implement sustainable development strategies and the business benefits referred to in Section 3.0, Environment Canada should play a key role in encouraging publicly-funded lending institutions to add the element of pollution prevention as an essential criterion in decision making affecting loan approvals.

This recommendation is consistent with recent efforts by government departments to encourage sustainability in all of their activities, as is evidenced in the sustainable development strategies submitted to the Auditor General. For example, under the goal of

promoting sustainable communities and businesses in Atlantic Canada, the sustainable development strategy[11] for the Atlantic Canada Opportunities Agency (ACOA) has targeted effective environmental screening of all of its projects. The Agency has committed itself to examining its current project review procedures with the objective of providing enhancements, where appropriate. Thus an opportunity exists for Environment Canada to promote the incorporation of pollution prevention techniques as an essential element in ACOA's project review procedures, thereby assisting the Agency in the achievement of its sustainability objectives.

While the above example identifies a specific opportunity for partnership in which Environment Canada can promote its mandate of protecting the environment through pollution prevention with a sister agency, the recommendation incorporates an effort on the part of Environment Canada to seek similar opportunities with other publicly-funded lending institutions, be they at the federal or provincial level.

[11] ACOA. 1997. *Opportunities for Sustainable Development*. Tabled in the House of Commons, Dec. 10, 1997.

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Appendix A
Understanding Environmental Liability

I. Definitions[12]

(i) Liability

A liability is a ***legally-enforceable, present obligation*** to make an expenditure in the future.

A liability may be voluntarily entered into, such as a contractual obligation, or it may be imposed unilaterally, such as the liability to pay taxes. The law both establishes liability and determines who is responsible for discharging them.

(ii) Environmental Liability

A ***legal obligation*** to make a future expenditure due to the ***past or ongoing*** manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment.

(iii) Potential Environmental Liability

A ***potential legal obligation*** to make a future expenditure due to the ***ongoing or future*** manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment.

An obligation is potential when it depends on future events or when a law or regulation creating the liability is not yet in effect. Thus, a ***potential environmental liability*** differs from an ***environmental liability*** in that an organization may have the opportunity to prevent the former from occurring by altering existing practices or adopting new ones, in order to avoid or reduce adverse environmental impact.

II. Types of Environmental Liabilities

Environmental liabilities arise as a result of a number of activities initiated by both the public and private sector. In all cases, they impose a legal obligation on the party deemed to be responsible to comply with stated environmental laws and regulations. Some examples of the different types of liabilities include:

[12] USEPA. 1996. *Valuing Potential Environmental Liabilities for Managerial Decision-Making: A Review of Available Techniques*. Office of Pollution Prevention and Toxic Substances, Washington, D.C.)

- ***compliance obligations*** relating to laws and regulations on activities that adversely affect the environment and may include obligations to pay fines and penalties resulting from non-compliance with the laws and regulations;

- ***remediation obligations*** (existing and future) relating to contaminated real property;

- ***compensatory obligations*** to private parties for personal injury, property damage and economic loss;

- ***punitive damage obligations*** to pay for grossly negligent conduct (the measure of punitive damages differs from compensatory obligations in that it is not tied to the actual injuries sustained);

- ***natural resources damage*** obligations to pay for damages to public or common property.

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 1980) of the United States and under various Canadian provincial and federal statutes, lenders may be exempted from a client's liability as long as the security interest holder does not exert operational control in the management of the borrower's business.

Additionally, trustees, administrators or executors are also potentially liable for environmental problems which occurred prior to or after acceptance of the appointment. In Canada, a firm of bankruptcy trustees in Quebec was found liable in November 1997 for damages resulting from the improper storage of PCB materials on the property for which the firm was acting as the trustee. It was the first time in Canada that bankruptcy trustees have been sentences on such counts under CEPA[13].

III. Approaches to Valuing Potential Environmental Liabilities

In its 1996 report entitled *Valuing Potential Environmental Liabilities for Managerial Decision-Making: A Review of Available Techniques*, the USEPA identified the following approaches currently being used in assigning costs to environmental risk:

- Actuarial techniques based on historical data on the costs and/or occurrence of environmental liabilities or events (e.g. accidents) or consequences (e.g. adverse health outcomes) that can lead to environmental liabilities;

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[13] *Let's Talk Green* Newsletter, January/February 1998, p. 12.

- Professional judgment and cost estimation (e.g. engineering, scientific or legal);
- Decision analysis techniques which serve to structure expert judgment and to characterize and present the results of environmental liability valuation;
- Modeling techniques to supplement professional judgment when historic data relating to cost and occurrence is limited;
- Scenario techniques to describe the impact of future situations that can affect environmental liabilities;
- Valuation methods, including a variety of legal rules and economic techniques, for putting monetary values on environmental consequences for compensation and natural resource damage liabilities respectively.

Based on research to identify techniques for valuing potential environmental liabilities, three dozen references with potential applicability to forward-thinking management decisions have been identified by the EPA. These cover all aspects of environmental liabilities described in this Appendix, include a mix of the approaches identified above and address situations ranging from waste disposal associated with active and inactive sites to transportation accidents and accidental and deliberate release at operating facilities.

While it is encouraging to note that valuation techniques are available for incorporating environmental considerations into managerial decision-making, much work needs to be done to make this practice common usage among business decision-makers. The Office of Pollution Prevention and Toxic Substances, USEPA, has indicated that effecting any long-term change in the area of environmental considerations into analysis will require:

- identifying the problems and assessing the needs;
- developing methods for estimating and including environmental costs;
- testing for practicality and utility;
- establishing a new standard integrated methodology;
- incorporating that methodology into decision-making and accounting systems.

IV. Lending Institutions' Response

Lending institutions have responded to the government's policy of imposing liability for environmental damages by questioning the soundness of the policy in meeting its stated objective of environmental protection. In its 1991 publication[14], the Canadian Bankers Association (CBA) argued that the broad-based imposition of environmental liability, as defined in legal statutes, is itself an "environmental hazard". The rationale for this argument being that, in an effort to protect itself from a client's environmental risk, environmental risky businesses that are most in need of access to capital, either to clean up existing damage or to implement control or preventative measures, may find it difficult or almost impossible to access credit. This would be due both to a loss in creditworthiness associated with environmental risk and the reluctance of the banks to expose themselves to lender liability.

The report identified risky businesses as including those in the natural resources sector (e.g. mining, metal processes, oil and gas production and forestry) as well as a number of manufacturing industries in which chemical processes are in use. While this represents a substantial segment of Canada's economy, it is important to note that the total credit extended by banks in these sectors constitute less than 5% of overall non-mortgage lending portfolios of the Canadian markets. Thus, lenders could potentially eliminate all funding to environmentally-risky businesses in Canada, causing catastrophic impact on the Canadian economy, while still maintaining large overall lending portfolios.

The CBA concluded that while its members have a critical role to play in financing the changes that governments globally have been calling for in promoting the principles of sustainable development, it is unrealistic for policy makers to ignore the impact of environmental laws on capital formation. In cases where the laws impede access to capital, it should be done with a clear, defensible justification for imposing these impediments, and not because critical consequences of the resulting policies were not adequately identified.

On behalf of its members, the Canadian Bankers Association called for government to:

[14] Canadian Bankers Association. 1991. *Sustainable Capital: The Effects of Environmental Liability in Canada on Borrowers, Lenders and Investors*. November 1991, pp. 18.

- enforce the "polluter pay" principle with respect to environmental liability such that those who cause pollution or negligently permit it to continue should be held culpable;

- have strict liability rules so that those who have taken all precautionary measures to prevent an environmental catastrophe may claim the due diligence defence;

- have a statutory requirement for borrowers and vendors to disclose pertinent information on possible contamination of sites owned or occupied by them to lenders and purchasers;

- have liability limited to non-compliance with the laws of the day and allocate clean-up costs based on responsibility for the pollution. In cases where those who are responsible cannot pay or where clean-up is required due to past practices that were in compliance with the laws of the day, the costs should be treated as a social one; and,

- implement environmental assessment auditing standards, including a requirement for professional liability insurance, for preliminary and detailed site assessments. This would allow lenders, investors, borrowers and government to be assured of the quality of the recommendations and have some form of financial recourse should these recommendations fail to achieve to desired objective.

At the same time, the Canadian Bankers Association advised its members to take the following steps to minimize the potential risks of liability for environmental damage:

- evaluate the inherent environmental risks associated with any loan transaction and make the assessment of these risks an integral part of the due diligence review and credit analysis process;

- conduct an environmental audit, at the borrower's expense, if the credit analysis discloses a potential environmental risk. The audit should be conducted by a qualified, insured, environmental expert with the ability to disclose all potential environmental risks and provide estimated costs for any clean-up;

- avoid improperly interfering in the management of a borrower's business, with the sole exception of ensuring that environmental laws and regulations are being complied with;

- ensure appropriate representations, covenants and warranties are contained in the loan documentation as well as an indemnity from the borrower to

the lender relating to environmental clean-up costs or in damages incurred by the lender or its agents;

- prior to foreclosing, the lender should conduct further inspections of the borrower's premises to assist in determining whether or not to take title to the property granted as security. Foreclosing or otherwise taking title to a property granted as security may lead the lender to increased liability as well as losing any covenants agreed to by the borrower.

Appendix B

Environmental Issues Scoping Checklist for Business Counselors[15]

Issue	Question	Possible Actions
1. Environmental Performance Objectives	• Has client thought about building environmental goals into the business plan? • Can the client see a particular "green angle" to their proposal?	• Discuss some of the environmental trends and point out bottom line benefits to being proactive. • Discuss opportunities specific to proposal and provide basic information on building environmental goals into business plan.
2. Issues Related to Business Site	• Is a new site being purchased for the business? • If an existing site is being used, (a) does the owner know its history (at least 80 years), and (b) could it be contaminated?	• Alert client to potential environmental requirements of lending agencies. • Provide client with information on site audits/investigations.
3. Use of Hazardous Materials	• Will the business be using hazardous materials and does the client know what they are? • Is the client aware of the range of regulations affecting (a) the transportation, storage and disposal of hazardous materials, and (b) worker health and safety issues? • Is the client aware of the various regulatory and voluntary initiatives to reduce or eliminate certain chemicals? • Is the client aware of the potential benefits of pollution prevention programs?	• Discuss types of regulatory requirements with client. • Send client to appropriate agency, e.g. , ■ Provincial DOE ■ Provincial D. of Labour ■ Environment Canada ■ Transport Canada • Provide client with some introductory information on the benefits of pollution prevention programs and advice on where to find more information.

[15] Produced as a result of the *Business and Environment: The Bottom Line - Training Workshop for Business Advisors and Environment Staff*, sponsored by Environment Canada, June 1996.

Issue	Question	Possible Actions
4. Waste Disposal	• Does the client know what types and quantities of wastes the business will produce? • Does the client know how these wastes will be dealt with (recycling, treatment, disposal, etc.) and what it will cost? • Is the client aware of the changing waste management situation (regulations, landfill bans, rising costs)? • Has the client considered how these wastes could be reduced?	• Encourage client to identify waste types and volumes. • For hazardous wastes, see #6 below. • Discuss changing solid and liquid waste situation (regulations and costs). • Provide basic information on waste reduction opportunities and benefits.
5. Risks and Liability	• Does the business carry any environmental risks (possible leaks, spills, accidents which could cause environmental damage)? • Is the client aware of liabilities and responsibilities under appropriate Environmental Acts, especially the need for due diligence? • Is the client familiar with the concept of an Environmental Management System (EMS) and how it relates to risk and liability reduction?	• Provide client with information on appropriate provincial and federal Environmental Acts. • Discuss in general terms how developing an Environmental Management System can reduce risks. Provide some further information (CSA, ISO 14000, etc.). • Send client to appropriate provincial DOE.
6. Provincial Environmental Assessment	• Could this proposal/project be classified as a Class 1 or Class 2 undertaking according to Environmental Assessment Regulations? • Is it possible that this proposal could stir up considerable public controversy (which may also make it eligible for assessment)?	• Send client to appropriate provincial DOE. • Discuss with client the need to build environmental assessment costs into business plan. • Discuss importance of proactive community relations.

Issue	Question	Possible Actions
7. Federal Environmental Assessment Process (generally applies to large projects).	• Does this proposal involve a federal authority in one or more of the following ways: ■ providing financial assistance; ■ selling, leasing or transferring land; ■ issuing a permit, licence or other approval?	• Consult CLEAR computer program to clarify whether project comes under Canadian Environmental Assessment Act. • Send client to Canadian Environmental Assessment Agency.
8. Permits, Approvals and Licences.	• What permits, approvals or licences will be required?	• Consult appropriate provincial databases to develop list.
9. Customer Relations	• Does the client know what environmental requirements or expectations their customers might have? • Is the client planning to export goods or services? • Is the client familiar with international environmental standards and marketing programs (such as ISO 14000, Green Globe)?	• Discuss possible customer expectations (and how to assess them). • Provide basic information on environmental standards, if appropriate. • Direct client to further information sources.
10. Community Relations	• Does the client feel confident he/she knows how local residents will respond to this new or expanding business in their community? • Is the client planning proactive communications with the local community?	• Discuss potential community expectations and concerns. • Discuss possible role of Environmental Management Systems in good community relations.
11. Information Resources	• Would the client like some additional information or advice on business and environment bottom line issues?	• Suggest contacting appropriate business associations. • Provide resource list.

Appendix C

A Statement by Banks on the Environment and Sustainable Development [16]

We, the undersigned, believe that human welfare, environmental protection and sustainable development depend on the commitment of governments, businesses and individuals. We recognize that the pursuit of economic growth and a healthy environment are inextricably linked. We further recognize that ecological protection and sustainable development are collective responsibilities and must rank among the highest priorities of all business activities, including banking. We will endeavor to ensure that our policies and business actions promote sustainable development: meeting the needs of the present without compromising those of the future.

1. General Principles of Sustainable Development:

1.1 We believe that all countries should work towards common environmental goals.

1.2 We regard sustainable development as a fundamental aspect of sound business management.1.3 We believe that progress towards sustainable development can best be achieved by working within the framework of market mechanisms to promote environmental protection. We believe that there is role for governments to provide the right signals to individuals and business, to promote behavioral changes in favor of effective environmental management through the conservation of energy and natural resources, whilst promoting economic growth.1.4 We regard a versatile, dynamic financial services sector as an important contributor towards sustainable development.1.5 We recognize that sustainable development is a corporate commitment and an integral part of our pursuit of good corporate citizenship. We are moving towards the integration of environmental considerations into banking operations and business decisions in a manner which enhances sustainable development.

2. Environmental Management and Banks:

[16] United Nations Environment Programme, Economics, Trade and Environment Unit, Geneva Executive Center, CP 356, 1219 Geneva, Switzerland ; Internet at http://www.unep.ch/eteu/envr-fin.htm

2.1 We subscribe to the precautionary approach to environmental management, which strives to anticipate and prevent potential environment degradation.2.2 We expect, as part of our normal business practices, that our customers comply with all applicable local, national and international environmental regulations. Beyond compliance, we regard sound environmental practices as one of the key factors demonstrating effective corporate management.2.3 We recognize that environmental risks should be part of the normal checklist of risk assessment and management. As part of our credit risk assessment, we recommend when appropriate environmental impact assessments.2.4 We will, in our domestic and international operations, endeavor to apply the same standards of environmental risk assessment.2.5 We look to public institutions to conduct appropriate, up-to-date and comprehensive environmental assessments in ventures with them, and to share the results of these assessments with participating banks.2.6 We intend to update our management practices, including accounting, marketing, public affairs, employee communications and training, to incorporate relevant developments in environmental management. We encourage banking research in these and related issues.2.7 We will seek to ensure that in our internal operations we pursue the best practices in environmental management, including energy efficiency, recycling and waste minimization. We will seek to form business relations with suppliers and sub-contractors who follow similarly high environmental standards.2.8 We support and will develop suitable banking products and services designed to promote environmental protection, where there is a sound business rationale.2.9 We recognize the need to conduct internal environmental reviews on a periodic basis to measure our operational activities against our environmental goals.

3. Public Awareness and Communication:

3.1 We will share information with customers, as appropriate, so that they may strength their own capacity to reduce environmental risk, and promote sustainable development.

3.2 We will foster openness and dialogue relating to environmental management with all relevant audiences, including governments, clients, employees, shareholders and the public.

3.3 We recommend that banks develop and publish a statement of their environmental policy and periodically report on its implementation.

3.4 We ask the United Nations Environment Programme to assist the industry by providing, within its capacity, relevant information relating to sustainable development.

3.5 We will periodically review the success in implementing this Statement and will revise it as appropriate.

3.6 We encourage other banks to support this Statement.

Appendix D

The Business Charter for Sustainable Development

Principles for Environmental Management[17]

ForewordThere is widespread recognition today that environmental protection must be among the highest priorities of every business.

In its milestone 1987 report, "Our Common Future", the World Commission on Environment and Development (Brundtland Commission) emphasised the importance of environmental protection to the pursuit of sustainable development.

To help business around the world improve its environmental performance, the International Chamber of Commerce created this Business Charter for Sustainable Development. It comprises sixteen Principles for environmental management which, for business, is a vitally important aspect of sustainable development.

This Charter assists enterprises in fulfilling their commitment to environmental stewardship in a comprehensive fashion, in line with national and international guidelines and standards for environmental management. It was formally launched in April 1991 at theSecond World Industry Conference on Environmental Management in Rotterdam, and continues to be widely applied and recognised around the world.

Introduction

Sustainable development involves meeting the needs of the present without compromising the ability of future generations to meet their own needs. Economic growth provides the conditions in which protection of the environment can best be achieved, and environmental protection, in balance with other human goals, is necessary to achieve growth that is sustainable. In turn, versatile, dynamic, responsive and profitable businesses are required as the driving force for sustainable economic development and for providing the managerial, technical and financial resources to contribute to the resolution of environmental challenges. Market economies, characterised by entrepreneurial initiatives, are essential to achieve this.

Business thus shares the view that there should be a common goal, not a conflict, between economic development and environmental protection, both now and for future

[17] International Chamber of Commerce, 38, Cours Albert 1er, 75008 Paris, France; Internet at http://www.iccwbo.org

generations. Making market forces work in this way to protect and improve the quality of the environment - with the help of standards such as ISO 14000, and judicious use of economic instruments in a harmonious regulatory framework is an on-going challenge that the world faces in entering the 21st century.

This challenge was recognised by the nations of the world at the 1992 United Nations Conference on Environment and Development, which called on the co-operation of business in tackling it. To this end, business leaders have launched initiatives in their individual enterprises as well as through sectoral and cross-sectoral associations.

In order that more businesses join this effort and that their environmental performance continues to improve, the International Chamber of Commerce continues to call upon enterprises and their associations to use the following Principles as a basis for pursuing such improvement and to express publicly their support for them.

Individual programmes to implement these Principles will reflect the wide diversity among enterprises in size and function.

The objective remains that the widest range of enterprises commit themselves to improving their environmental performance in accordance with these Principles, to having in place management practices to effect such improvement, to measuring their progress, and to reporting this progress as appropriate internally and externally.

Note : The term environment as used in this document also refers to environmentally-related aspects of health, safety and product stewardship.

Principles1. Corporate priority

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

2. Integrated management

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

3. Process of improvement

To continue to improve corporate policies, programmes and environmental performance, taking into account technical developments, scientific understanding, consumer needs and community expectations, with legal regulations as a 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 and 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 provision 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 minimisation 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 effort

To contribute to the development of public policy and to business, governmental and intergovernmental programmes 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 the 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 theseprinciples; and periodically to provide appropriate information to the Board of Directors, shareholders, employees, the authorities and the public.

Support for the Charter

The ICC undertakes to encourage member companies and others to express their support and implement the Charter and its Principles.

A list of these companies can be obtained from ICC Headquarters. The ICC also publishes regularly a Charter bulletin which provides more specific information on the

Charter's Principles and different interpretations possible - an attribute of the Charter that has been widely commended.

The first edition of Business Charter for Sustainable Development was adopted by the ICC Executive Board on 27 November 1990, and first published in April 1991. It was prepared and revised by the ICC Working Party for Sustainable Development.

Chairman: Peter Scupholme (British Petroleum)

Vice-Chairman: W. Ross Stevens III (Du Pont)