

# PRINCIPLES OF COMMUNICATING RISKS

*An examination of how risk communication can be effectively integrated with existing environmental management practices and procedures*

## EXECUTIVE SUMMARY

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Industrialization has introduced many benefits to modern society, but not without risks. Traditionally, risk-related decisions were made exclusively by regulators and industry relying on scientific information and cost/benefit analyses to educate and persuade the public. However, public confidence in this closed form of decision-making has gradually decreased.

The public's perception of risk often differs from that of experts due to a whole array of psychological, social, institutional and cultural factors. Risk perception research also demonstrates that the public does not consent to risks so much as it selects options.

The public will judge an option to be acceptable, based on a set of values, consequences and benefits, and select an option which strikes a tolerable balance between desirable and undesirable factors. Acceptability is not a technical decision, but rather a value judgment regardless of who is making the decision.

In selecting an option that represents, for them, a tolerable risk, the public makes its own decisions. If regulators or corporations attempt to usurp the decision-making process, the public will not automatically condone the results.

The public will more likely accept options if they are given sufficient information to understand the risk in context and are involved in making risk-related decisions.

Effective risk communication simultaneously acknowledges the significance of differing opinions and the importance of the information itself. It is defined in the paper as follows:

An interactive process of information and opinion exchange among individuals, groups and institutions about the nature of risks which results in shared decisions, active partnerships and management of environmental, health and safety risks in an improved atmosphere of trust between interested and affected parties.

***Risk communication is a process with a purpose: improved performance.***

***Principles of Communicating Risks sets out to examine ways in which risk communication can be effectively integrated with existing management practices and procedures.***

***The principles of communicating risks can be applied effectively at each step in the process when making risk management decisions.***

***Risk communication provides a context within which environmental management functions can be implemented effectively.***

Risk communication is a process with a purpose: improved performance. Improved performance based on informed, mutual decisions with respect to accepting and managing environmental, health and safety risks is in everyone's best interests.

*Principles of Communicating Risks* sets out to examine ways in which risk communication can be effectively integrated with existing management practices and procedures.

It first addresses four key factors:

- Multiple Stakeholders

Stakeholders are identified through the actual or potential harms and benefits that they experience or anticipate experiencing as a result of an organization's actions or inactions.

- Multiple Messages

No-one has a monopoly on the communication process.

- Information Content

Information content is not the most significant factor in explaining public opposition to projects. Much more important is an atmosphere in which open dialogue, trust and credibility prevail.

- Nature of Risk

Two other key factors of risk communication, risk management and environmental management, are briefly discussed. The principles of communicating risks - interactive exchange of information and opinion, shared decision-making, active partnerships and an improved atmosphere of trust - can be applied effectively at each step in the process when making risk management decisions. Furthermore, risk communication provides a context within which environmental management functions can be implemented effectively.

Some regulatory authorities and corporations, in an effort to anticipate, identify and resolve issues, are learning how to communicate risks effectively. Evolutionary factors are discussed under headings corresponding to the principles of risk communication - interactive exchange, shared decision-making and active partnerships - all of which contribute to an atmosphere of trust.

A key to interactive exchange of information and opinion is a willingness to receive as well as to give information.

Shared decision-making and communicating risks become an exercise in demonstrating accountability to the public.

***A key to interactive exchange of information and opinion is a willingness to receive as well as to give information.***

***Decisions are shared and, ultimately, communicating risks becomes an exercise in demonstrating accountability to the public.***

***Good risk communication strategies are characterized by the colloquial expression “All we have to do is make them partners”.***

***The public needs to “trust that decisions will be made with scrupulous fairness and uncompromised commitment to the protection of the public” interest if they are to accept the risks.***

Issues are framed, in part, by asking questions such as: Who takes the risks? Who gets the benefits? What do we want to leave for future generations?

Active partnerships in communication strategies are characterized by the colloquial expression “All we have to do is make them partners” (Fischhoff, 1995).

When dealing with potential risks, the public needs to “trust that decisions will be made with scrupulous fairness and uncompromised commitment to the protection of the public” interest if they are to accept the risks (Kasperson et al., 1992).

Trust generally evolves slowly, can be destroyed in an instant, and is difficult to regain. Distrust, on the other hand, is quickly gained and slowly replaced. To regain public confidence, organizations must begin to build trust with their stakeholders. Building trust is an outcome of effective risk communication.

The evolution of risk communication in Alberta is illustrated with seven examples taken from the petroleum industry, the first of which dates back to the late 1970s.

The examples illustrate that communication practices have varied between corporations

over time and within single corporations at different times. The absence of planned risk communication programs erodes public trust in petroleum industry risk managers.

In a recent study, Angus Reid concluded “the petroleum industry has failed to effectively communicate its environmental protection policies and practices to a significant number of Canadians.” (Petroleum Communication Foundation, 1996). Polls conducted in 1996 found that fully 36% of Albertans surveyed believed oil companies to be “careless” in their environmental consciousness, and that such widespread beliefs have a direct impact on the economic fortunes of the petroleum industry.

The petroleum industry appears to have recognized the need for better communications, as is evident from a number of initiatives currently under way. Nevertheless, the divergence between public and industry perceptions regarding environmental performance and risk confirms the need for more effective industry practices in communicating risks.

Five main forces are driving organizations towards risk communication: public concern, communication crises, regulatory requirements, codes of conduct, and cost avoidance.

***Given that public concerns continue to escalate, risk managers need to be able to apply procedures that respond effectively both to internal and to external stakeholders.***

***The Conference Board of Canada says that corporations “with integrated risk management processes have a competitive advantage in being better able to exploit risk opportunities and minimize risk hazards”.***

***Combining lessons learned from both environmental management best practices (internal procedures) and risk communication best practices (external processes) can provide risk managers with effective responses.***

The question then arises: How best to implement a risk communication program?

*Principles of Communicating Risks* addresses this question by exploring how organizations can enhance their environmental performance by integrating risk communication with existing management practices and procedures.

Given that public concerns about environmental and health risks associated with industrial processes and products continue to escalate, risk managers need more than internal procedures to respond effectively. They need to be able to apply procedures that respond effectively both to internal and to external stakeholders.

Combining lessons learned from both environmental management best practices (internal procedures) and risk communication best practices (external processes) can provide risk managers with valuable information regarding effective responses to the many demands being placed on managers, operators and regulators of modern industrial processes and products.

A growing number of organizations are beginning to adopt integrated risk management systems, as is evident from the Conference

Board of Canada’s *A Conceptual Framework for Integrated Risk Management* (Nottingham, 1997). Encompassing a broad range of operating and strategic risks, Nottingham draws on the experience of several members of the Global Council on Risk Management to conclude that corporations “with integrated risk management processes have a competitive advantage in being better able to exploit risk opportunities and minimize risk hazards”.

Because risk communication is a process with a purpose, it is most effective if applied whenever decisions affecting health and safety risks are being considered, determined, implemented and reviewed.

One strategy for undertaking such decisions is the environmental management system (EMS). A well-designed EMS is itself completely integrated with an organization’s overall management activity (Wilson, 1992) and was therefore chosen as a vehicle for illustrating ways to integrate risk communication with existing management practices and procedures.

Examples drawn from actual practice are provided when available and the four principles of risk communication are discussed under six headings.

**An effective risk communication policy includes commitments to:**

- **open and honest communication;**
- **early release of information;**
- **meaningful processes for explaining risks;**
- **processes for incorporating community concerns and values;**
- **shared decision-making; and**
- **a relationship built on trust.**

The first heading is *Commitment*. Corporate boards of directors have a duty to keep informed on issues affecting the corporation. A number of ways to promote an interactive exchange of information and opinion in the course of discharging their responsibility are suggested.

An interactive exchange in risk communication terms presupposes that differing risk perceptions, cultures and local knowledge are given credence in the exchange. Directors can avail themselves of such information and opinions by the simple expedient of asking management to include in their periodic reports a summary of external stakeholder positions.

Many corporations have instituted the practice of holding at least one session a year to review an “issues scan” prepared for the purpose either by staff or by outside consultants.

The board may also adopt a formal policy promoting interactive exchange of information and opinions.

In addition, the board may endorse and publish the organization’s risk communication policy.

An effective risk communication policy commits to:

- open and honest communication;
- early release of information;
- meaningful processes for explaining risks;
- processes for incorporating community concerns and values;
- shared decision-making; and
- a relationship built on trust.

At least one corporation has committed to meeting environmental, health and safety standards established by “the community and the government” thereby implying a commitment to shared decisions. Another has explicitly committed to a “partnership approach between government, industry and the public”.

Finally, the board can help foster an atmosphere of trust by ensuring that the organization’s environmental performance is congruent with its environmental policy.

The second heading is *Management*. Environmental, health and safety risks need to be managed at every level of an organization.

Establishing a hierarchy of reporting and accountability responsibilities enhances the probability that information and opinion will be exchanged.

***Experience increasingly shows that decisions made with the involvement of interested and affected parties are more effective and more durable (Presidential/Congressional Commission, 1997).***

***Promises of open communication need to be consistently upheld, not only during emergencies and crisis events but through all daily activities and operations.***

Performance appraisals provide an opportunity to share decisions with respect to environmental performance objectives.

One example is cited, in which risk managers agreed to forge an active partnership with internal stakeholders (employees) to manage potential environmental and health risks associated with antisapstain chemicals.

Organizations can also actively partner with internal stakeholders by undertaking education and training programs as a matter of course.

The third heading is *Planning*. Two environmental management tools are used to illustrate risk communication opportunities in the course of planning activities - emergency response plans (ERPs) and environmental impact assessments.

An interactive exchange of information and opinion values local knowledge. During a review of public safety and sour gas, community groups expressed the view that one of the most important elements of an ERP is participation by all stakeholders in developing the plan (ERCB, 1994).

Stakeholders can also take part in post-incident evaluations of a simulation exercise.

Experience increasingly shows that decisions made with the involvement of interested and affected parties are more effective and more durable (Presidential/Congressional Commission, 1997).

The fourth heading is *Implementation*. The Responsible Care program is used to exemplify risk communication opportunities.

The Responsible Care program implicitly includes provisions for incorporating stakeholder input through national and local advisory committees.

Participation in a Responsible Care program involves the entire company, from CEO to line staff, in a commitment to continuous improvement in environment, health and safety performance. This proactive approach to communicating risks can generate an atmosphere of trust with stakeholders.

However, promises of open communication need to be consistently upheld, not only during emergencies and crisis events but through all daily activities and operations.

Moreover, open communication needs to be accompanied by some level of shared decision-making and active partnerships for an atmosphere of trust to be established and maintained.

***“Managing the process of technological innovation in modern industrial societies is nothing but the assessment, communication, and management of risks.”***

***An interactive exchange of information and opinion can ensure that appropriate environmental issues of concern are evaluated.***

***Sharing decisions about what, how and where to measure environmental performance goes some distance toward providing a common database on which to base management decisions.***

The fifth heading is *Measurement and Evaluation*. Leiss asserts that “managing the process of technological innovation in modern industrial societies is nothing but the assessment, communication, and management of risks” (Leiss: 1996). Assessing risks, however, necessitates measuring whatever impacts industrial activities may cause and evaluating their significance.

Measuring impacts begs the questions: What is to be measured? What measuring devices should be used and where should they be located? How often should data be gathered?

In designing a monitoring program, interactive exchange among stakeholders can help ensure that the data gathered is comprehensive, relevant and timely.

In environmental auditing, an interactive exchange of information and opinion can ensure that appropriate environmental issues of concern are evaluated.

Risk communication is designed to deliver improved performance through informed, mutual decisions with respect to accepting and managing environmental, health and safety risks. Sharing decisions about what, how and where to measure environmental

performance goes some distance toward providing a common database on which to base management decisions.

An atmosphere of trust may be generated as a result of incorporating principles of risk communication into monitoring and auditing activities. An organization can exhibit the four key dimensions of trust - commitment, competence, caring and predictability - when it involves stakeholders in various phases of a monitoring program.

Publishing environmental audit statements also generate public trust, although many businesses are unwilling to expose themselves to potential legal liability by making audit results publicly available. The European Community's Eco-Management and Auditing Scheme, however, requires corporations to provide public audit statements.

The sixth and final heading in the section which deals with integrating risk communication is *Review and Improvement*. Environmental reports are used to illustrate risk communication opportunities.

Environmental reporting need not be confined to formal corporate environmental reports. Many take regional industrial activities as their primary subject, or focus on a single topic. Voluntary Challenge and

***The Canadian Institute for Chartered Accountants found that organizations produced higher quality documents when they consulted extensively with stakeholders prior to issuing the reports.***

***Effective corporate environmental reports:***

- outline objectives;***
- provide measurable targets of environmental performance; and***
- report data in a standardized format.***

***A corporate environmental report gains credibility by providing both good and bad news.***

Registry action plans provide an example of the latter.

Including feedback opportunities such as comment cards and 1-800 call numbers and conducting readership surveys can encourage a two-way communication process.

Editorial boards and feature writers can be recruited from among community members and other external stakeholders as active partners in producing periodic reports which track environmental performance over time.

As to corporate environmental reports, the Canadian Institute for Chartered Accountants found that organizations produced higher quality documents when they consulted extensively with stakeholders prior to issuing the reports.

Effective reports provide audiences with information to evaluate an organization's environmental performance. They outline objectives and provide measurable targets of environmental performance and report data in a standardized format so that information is consistently presented. Stakeholders are then able to ascertain what commitments have been made, whether activities have achieved the stated goals, objectives or targets, and which areas continue to require improvement.

Some stakeholders regard validation from an independent, impartial third party to be a prerequisite for report credibility (IISD, 1993) although few such verifications have been undertaken. KPMG (1994) suggests that organizations will increasingly adopt a practice of having independent third parties validate their reports.

To achieve credibility, an organization must be honest and open in its reporting of environmental performance. Discussing both good and bad news in environmental reports provides a more balanced view of performance and is becoming an accepted standard (CICA, 1994).

*Principles of Communicating Risks* next turns to a consideration of implementation issues.

Implementing risk communication principles requires changes in the way many risk managers think about their responsibilities in communicating risks and managing environmental, health and safety risks. Many organizations still resist undertaking the practice of risk communication.

Ten common barriers to implementation are discussed, together with possible solutions.

***Risk communication is an investment and may be an insurance policy.***

***Ultimately, it builds stakeholder relationships and informed, mutual decisions about managing environmental, health and safety risks.***

***Facilitating organizational change from a reactive to a proactive posture necessitates a “shift of mind” to systems thinking.***

The following ten common barriers are addressed:

- perception of limited resources;
- certainty of internal knowledge and expertise;
- fear of losing control;
- fear of creating conflict;
- fear of causing alarm;
- fear of competitive disadvantage;
- fear of exposure to legal liability;
- lack of research demonstrating the value of integrated management;
- reactive approach to risk communication; and
- risk communication perceived to be outside the core business.

Not all organizations will face the same barriers to risk communication, nor will every organization or risk manager experience all of the barriers. A number of solutions are suggested. The solutions are not offered as a panacea, but rather as illustrations of the sort of response that may assist risk managers who want, or are compelled, to seek a way past the barriers they are experiencing.

The very real constraint imposed by limited resources, for example, can be at least mitigated by accepting that risk communication is an investment and may be an insurance policy. Ultimately, it builds stakeholder relationships and

informed, mutual decisions about managing environmental, health and safety risks.

Conflict and controversy can best be addressed by openly exchanging information and opinion and building relationships before issues take on gargantuan proportions. It is sometimes helpful to remind risk managers that organizations routinely canvass information and opinion on technical and financial issues in order to prevent inopportune surprises.

The fear of causing alarm is not well supported by empirical evidence. Precedents such as the silicon breast implant class action lawsuits in the US or the more recent Swan Hills controversy in Alberta ought to provide sufficient evidence to persuade risk managers that provisional data is better than no data at all.

Finally, facilitating organizational change from a reactive to a proactive posture necessitates what Senge (1990) called a “shift of mind” to systems thinking.

“Systems thinking ... is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static ‘snapshots’. It is a set of general principles ... and specific tools and techniques, originating in two threads:

***When risk managers apply systems thinking, they typically regard risk communication as an integral component of their organization's core business.***

***More conceptual models are needed, together with more empirical research into effective, practical applications of the principles.***

***Implemented properly, an integrated risk communication strategy yields positive returns for all.***

in 'feedback' concepts of cybernetics and in 'servo-mechanism' engineering theory ... During the last thirty years, these tools have been applied to understand a wide range of corporate, urban, regional, economic, political, ecological, and even physiological systems." (Senge, 1990: 68)

When risk managers apply systems thinking, they typically regard risk communication as an integral component of their organization's core business.

Communicating risks successfully is neither a public relations nor a crisis communications exercise. Its aim is not to avoid all conflict or to diffuse all concerns. Risk communication seeks to improve performance based on informed, mutual decisions with respect to accepting and managing environmental, health and safety risks.

Improved performance pays dividends for everyone. The public influences decisions to ensure outcomes are congruent with their personal priorities. Regulators profit from active public involvement. Occasionally, stakeholder involvement also promotes regulatory efficiency. Corporate benefits include an enriched quantity and quality of information.

Risks are trade-offs: uncertainty is to some degree an inherent factor in every decision about environmental, health and safety risks. Risk communication enhances the corporation's ability to meet its competitive challenges both financially and functionally, improving relations with employees, customers and other stakeholders. It also stimulates organizational effectiveness as it promotes internal communications and facilitates cross-functional integration, anticipatory processes and comprehensive strategic responses.

It is clear from the examples of risk communication in action cited in the *Principles of Communicating Risks* that some corporations and institutions have adopted exemplary management practices. Still, it is also fair to say that precedents do not abound.

More conceptual models are needed, together with more empirical research into effective, practical applications of the principles, to encourage other organizations first to adopt and then to integrate risk communication practices with existing operational processes.

Implemented properly, an integrated risk communication strategy yields positive returns for all.