Recognition, Measurement and Disclosure of Environmental Liabilities

by Paul Kazenski

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Biography

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During the past fifteen years, environmental legislation has proliferated at the federal, state and local levels. Businesses operating in the United States are now faced with the challenge of achieving and maintaining compliance with over 30,000 pages of federal regulations alone. Estimates of the potential costs to remediate past environmental damage run into the hundreds of billions of dollars. By the year 2000, businesses are expected to expend billions of additional dollars to assure that current and future operating activities achieve and maintain environmental compliance.

There is evidence that corporate executive and director attitudes have begun to reflect a greater awareness of, and increasing sensitivity to environmental issues (United Nations, 1991a, 1991b; Nash, 1990; Coopers et al, 1990). However, much of this same evidence shows a disparity between the perceived importance of environmental issues, and the quality of environmental disclosure in publicly available financial statements. In part, the existence of this disparity has been tentatively attributed to a lack of detailed accounting standards relating to environmental issues, and to a reluctance on the part of corporate management to fully apply existing standards that would facilitate more complete disclosure (United Nations, 1992).

To deal with the demands for improved financial reporting, the accounting profession must confront fundamental questions relating to *timing* (i.e., determining when a loss become sufficiently probable to require accrual and recognition in the financial statements), *recognition*, (i.e., formally recording or incorporating an item into the financial statements),

recognition, (i.e., formally recording or incorporating an item into the financial statements), *measurement* (i.e., determining the value at which to record a probable loss), and *disclosure* (i.e., given the uncertainties surrounding the loss, determining where (and how) in the financial statements the facts should be communicated). These questions are closely interrelated, and will almost certainly require reliance on outside expertise to provide the information necessary to make informed professional judgments.

This paper undertakes to review current standards and practices with regard to the recognition, measurement, and disclosure of environmental related liabilities in corporate financial statements. Its purpose is twofold: to establish the nature and extent of current requirements and practices; and to identify emerging trends likely to result in demands for still more detailed disclosure.

Overview

Policy makers, advisory groups, and professionals worldwide have begun to address the issues related to establishing standards for improved financial reporting of environmental costs and liabilities. In the United States, the American Institute of Certified Public Accountants (AICPA) has issued an exposure draft on a proposed Statement of Position which would call for more complete disclosure of certain significant risks and uncertainties, including those relating to environmental matters. The Securities and Exchange Commission (SEC) recently revised regulation S-K to require additional disclosures of material effects of regulatory compliance on capital expenditures, earnings, and competitive position. Although no environmentally related reporting issues have yet been added to the Financial Accounting

Standards Board's (FASB) agenda, the likelihood that the Board will be called upon to do so is increasing (Johnson, 1993).

In 1992 and 1993, the Canadian Institute of Chartered Accountants (CICA) issued research reports directed towards resolving fundamental issues involved in the financial reporting of environmental costs (CICA 1993), and accounting's role in environmental auditing (CICA 1992). The United Nations, European Community, International Accounting Standards Committee (IASC) and the Federation des Experts Comptables Europeens (FEE) are all actively seeking solutions to the problems underlying the financial statement recognition and disclosure of environmental liabilities.

Motivating these activities is increasing apprehension over the disparity between the estimated costs to remediate already known environmental damage, and the amounts being reflected in corporate balance sheets. In the U.S., specific concerns have been raised with respect to the apparent lack of symmetry between the anticipated insurance recoveries being used to offset all or part of these liabilities, and the failure of insurers to disclose a corresponding liability in their own financial statements (GAO, 1993).

In turn, insurers and non-insurers alike cite the complexity of existing environmental regulations as a major impediment to making cost estimates required for financial reporting. Further, insurers point to inconsistent judicial decisions regarding the existence of insurance coverage for environmental losses as a confounding factor in determining whether they have any obligation at all to satisfy environmental claims.

Presently, there are five major U.S. statutes that can impose substantial costs on business enterprises relating to past, current and future activities. Of these the Clean Air Act

(CAA: 42 USC 7401 et seq.), Clean Water Act (CWA: 33 U.S.C. 1251 et seq.), Toxic Substances Control Act (TSCA: 15 USC 2601 et seq.), and the Resource Conservation and Recovery Act (RCRA: 42 U.S.C. 6901 et seq.) are primarily directed at the control of present releases into the environment, and the prevention of future releases of hazardous substances. The financial costs imposed by these statutes are generally considered to be operating expenses of the enterprise, and as such present no particular difficulties for insurers.

The most far reaching of the statutes is the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA: 42 U.S.C. 9601 et seq.) and its companion Superfund Amendment and Reauthorization Act (SARA) of 1986. CERCLA addresses the uncontrolled release of hazardous materials into the environment caused by past activities, and requires remediation at sites where the release of hazardous substances is likely to occur. Two facets of the act are of most most immediate relevance here. The first is its imposition of strict, joint, and several liability for the costs of cleanup on potentially responsible parties (PRP's) that can include almost anyone that has come into possession of hazardous waste, including subsequent purchasers of property even though there was no connection between the purchaser and the pollution activities occurring prior to acquisition (N.Y. v Shore Realty 759 F2d 1032, 2d Cir 1985). The second, and perhaps most ominous, is that "it has no regard for time" (Becker, 1992). Liability is imposed retroactively and without any statute of limitations; it is based upon current standards and does not exempt prior activities that were in compliance with standards existing at the time they occurred.

Financial accounting and reporting concerns extend to all environmental costs, whether associated with past, current, and future activities. In light of their more immediate significance to insurers, however, the remainder of this paper emphasizes issues raised by the retroactive liabilities imposed by CERCLA.

Fundamental Accounting and Reporting Issues

Financial reporting is "directed toward the common interest of various potential users in the ability of an enterprise to generate favorable cash flows" (Statement of Financial Accounting Concepts (SFAC) No. 1). To serve this common interest, both accurate and complete disclosure are necessary to assure that the financial statements are not misleading to investors, creditors and other users.

Environmental liabilities present some particularly difficult financial reporting challenges because of the uncertainties to which they may be subject, many in the nature of contingencies. Consequently, accounting guidance is taken primarily from Statement of Financial Accounting Standards No. 5, "Accounting for Contingencies" (FAS 5) which requires that a contingent loss be accrued (recognized) when it is "probable that an asset had been impaired or a liability had been incurred" and "(b) the amount of loss can be reasonably estimated." If a loss is not required to be recognized because either of these criteria are not met, disclosure of the contingency may still be necessary if there is "at least a reasonable possibility" that a loss may have been incurred.

The language in FAS 5, though not specifically stated, also applies to insurance company accruals of liabilities relating to litigation and claims, whether asserted or

unasserted. Where a suit has been filed or a claim has been made, recognition is necessary if it is determined that a loss is both probable and estimable. In the case of unasserted claims, an insurer must "determine the degree of probability that a suit may be filed or a claim ... may be asserted and the possibility of an unfavorable outcome."

Neither U.S., Canadian, nor International standards establish quantifiable thresholds for either of the terms "probable" or "reasonably estimable." Rather, these determinations are left as matters of professional judgement (CICA 3290.12; IAS 10, par. 8). Consequently, both financial statement preparers and auditors have substantial latitude in judging whether the underlying uncertainties have been sufficiently resolved so that financial statement recognition is necessary, or that sufficient uncertainties remain so that disclosure alone is appropriate.

Although both recognition and disclosure convey potentially useful information to the users of financial statements, the FASB has repeatedly emphasized that disclosure is neither a substitute for, nor an alternative to recognition. Statement of Financial Accounting Concepts No. 5 states: "Disclosure of information ... that may be provided by notes or parenthetically on the face of financial statements, by supplementary information, or by other means of financial reporting is not a substitute for recognition in financial statements for items that meet recognition criteria" (par. 9). In a recent exposure draft of a proposed standard, the FASB reiterated the distinction between recognition and disclosure, and explicitly rejected the notion that improved disclosures may be equally useful as recognition.

Substantial professional judgment is required in determining whether financial statement recognition is required. An affirmative decision presumes (1) a factual

determination that an obligation exists; (2) an identification of the costs incurred or to be incurred, or the amount of loss sustained; and (3) the selection of a measurement basis from which to assess the amount of the costs or losses involved.

Timing of Recognition

Recognition concerns do not arise spontaneously; some event, either internal or external to the enterprise, must first raise at least a suspicion that such a liability exists. Other events must then follow which indicate the probability of existence is more than remote, and reduce to some acceptable level the uncertainty regarding the amounts involved. Only after both existence and measurement uncertainties have been adequately resolved will recognition occur.

Presently, there is no hard data about what events first give rise to suspicions that an environmental liability may exist. As a result, data are also lacking with respect to the process by which uncertainties concerning the existence of potential liabilities are actually resolved in practice. There have, however, been some efforts to identify those points in time at which environmental liabilities are first recorded by non-insurance enterprises, several of which are discussed below. Unfortunately, there is no corresponding data with respect to the timing of initial recognition by insurers.

Recognition Triggers

Commencement of operations. In certain industries, e.g. mining, commencement of operations may be sufficient to trigger recognition. Where environmental damage is a direct consequence of the enterprise's operating activities, and it is the responsibility the enterprise

to incur site restoration and related costs, accounting standards require that these costs be accrued and charged to income currently (FAS 19). Specific accounting guidelines exist for the recognition of nuclear power plant decommissioning costs (FAS 71). Landfills that have an obligation to make future expenditures to comply with RCRA post closure monitoring requirements are required to accrue the liability currently, with municipal landfills being subject to Statement of Governmental Accounting Standards (GASB) No. 18. These costs are considered to be current operating expenses of the enterprise, and generally do not result in potential claims against insurers.

Internal discovery of an existing problem, including reports of current events with the potential for consequent environmental damage may initiate investigation into the existence and possible recognition of a liability. The effectiveness of internal reporting in alerting management to potential environmental problems would be expected to depend upon the level of environmental awareness, technical competence in recognizing potentially hazardous situations, and whether or not there are processes in place to monitor ongoing activities.

There are indications that the frequency of financial statement recognition upon internal discovery is increasing. Responses to the Price Waterhouse (1991 and 1992) studies indicate that the percentage of respondents accruing clean-up costs upon internal discovery of a problem rose from two percent in 1990 to 56 percent in 1992.

Commencement of litigation against an enterprise could also be expected to trigger recognition in the financial statements. Presently, there is no definitive evidence on how prevalent recognition at this point is. Generally, disclosure (as opposed to recognition) is

provided either in Management's Discussion and Analysis or in the notes to the financial statements along with other unrelated litigation matters.[1]

Initial notification by a regulatory agency. The existence of a potential liability is called into question whenever notice has been served that a violation of environmental regulations has or may have occurred, or that the entity has been named a potentially responsible party (PRP) in connection with a hazardous waste disposal and storage site subject to CERCLA or equivalent state law. Notification alone does not conclusively establish the existence of a legal obligation, nor does it necessarily indicate an amount or range of amounts for which the enterprise may be ultimately held liable. There is, however, some minimum cost associated with responding to the regulatory action, suggesting the recognition of at least these direct costs.

In actual practice, a decision to delay recognition appears to predominate. Price Waterhouse reports that only 12 per cent of the respondents to the 1990 survey recognized a liability upon initial notification; in its 1992 survey, this number increased to 22 percent.

In connection with the performance of a Remediation Investigation/Feasibility Study (RI/FS). Subsequent to being named a PRP, it may be necessary to direct efforts towards assessing the nature and extent of the problem, the agent or agents responsible for actual or impending damage, and identify strategies for remediation, if necessary. At the point the RI/FS is initiated, the obligation to incur the cost has been established, and there is at least a minimum estimate of the costs to be incurred in connection with the study. As the RI/FS

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[1]Specific guidance for disclosure outside the financial statements can be found in items 101 (Description of Business), 103 (Legal Proceedings), and 303 (Management's Discussion and Analysis) of SEC Regulations S-K and S-B.

progresses, information will likely become available that will narrow the range of ultimate cost estimates, further supporting the need for recognition. At completion of the RI/FS, additional narrowing of the range of cost estimates is to be expected, adding further support for the need to recognize the corresponding liability.

Recognition at the initiation of a RI/FS appears to be limited, with only 16 per cent of the Price Waterhouse (1992) respondents indicating recognition at this point. This is, however, a substantial increase from the five percent of respondents that reported recognizing a liability at the initiation of a RI/FS in 1990. One possible reason for these relatively low numbers is that management views the results of the RI/FS to be necessary to reduce uncertainties regarding the ultimate costs to a tolerable level. Indeed, this appears to be the case. A majority of the respondents to the 1992 Price Waterhouse survey (52 percent) recognized a liability during the conduct of a RI/FS. An additional 20 percent reported recording cleanup liabilities on completion of a RI/FS (down from 28 percent in 1990).

Upon an offer of settlement. Normally, the amount of the settlement offer represents the responsible party's best estimate of its minimum cost to obtain a release from its obligation. Of course, some uncertainty will remain up to the point that the offer is accepted, and there is agreement with respect to any conditions imposed on the acceptance. Despite this remaining uncertainty, the recognition criteria of FAS 5 will generally have been met, and accrual of a liability of least the amount of the settlement offer is appropriate. Price Waterhouse reports 20 percent of the respondents to its 1992 survey (up from 15 percent in 1990) indicated that recognition occurred at this point. There is no currently

available information regarding the influence of settlement offers to third party claimants on the timing of recognition.

Upon contemplation of a purchase or sale transaction. Given the extension of liability for cleanup costs to owners and operators of property, including subsequent purchasers, recognition may be triggered at the point an enterprise contemplates either the disposition or acquisition of assets, including indirect asset purchases (merger and acquisition activities), discontinuance of operations, or divestitures of ownership interests. Recognition at this point in time is likely to increase as commercial real estate transactions now generally require some form of environmental audit be performed prior to consummation of a contract of sale. If the audit uncovers existing hazards, additional investigation is normally required to establish the extent of the problem and the probable costs of clean-up or containment, information which would support the seller's recognition of an environmental liability. Some 20 percent of the respondents to the 1992 Price Waterhouse study reported recognizing a liability in connection with a sale, disposal or abandonment of a facility.

Pay-as-you-go. Finally, recognition for environmental costs may be delayed until the related expenditures are actually made. Given the requirements of FAS 5, this method of accounting would be acceptable only in extreme cases where the future expenditures are so uncertain as to preclude estimation, or the amounts are sufficiently small as to be deemed immaterial. Despite the lack of accounting support for this method, some 18 percent of respondents to the PW 1992 survey (up from 15 percent in 1990) admitted to using a pay-as-you-go method to account for the costs of clean-up.

Although the Price Waterhouse survey results cited above provide some valuable insight into the timing of recognition in practice, certain limitations on these data should be noted. First, the sample is limited to respondents with known significant environmental liabilities. Second, the percentages cited above apply only to the recognition of clean-up costs associated with hazardous wastes generated in prior periods. Finally, the survey intentionally excluded financial services companies, so no inferences can be drawn concerning the timing of recognition in that sector.

Recognition by Insurers

The insurance contract requires that insurers be given prompt notice of claims or impending claims. Information supporting the recognition of environmental liabilities by a policyholder may also support a claim against its insurer. Barring questions of coverage (a matter discussed below), one would expect there to be a correlation between the time insureds make an affirmative recognition determination, and the time by which their insurers have at least initiated an assessment of the probability that an obligation to its insured exists. Consequently, notification to an insurer at the point in time a policyholder becomes aware of the existence of a potential liability—upon internal discovery, commencement of litigation, or notification by a regulatory agency, e.g.— might also serve to trigger recognition of a corresponding liability, or begin the process of assessing the need for recognition. Similarly, as new information is gathered, e.g., during the conduct of a RI/FS, the incidence of recognition on the part of insurers should increase as uncertainties are resolved. Again, barring coverage disputes, an insurer will normally have been sufficiently involved with the claim that recognition at the time a settlement offer is made would be appropriate.

In reality, the question of whether or not insurance coverage extends in a particular circumstance is often disputed, and is presently the subject of a substantial amount of litigation. In its 1993 report to stockholders, Aetna reported that eight percent of its open claims "represented coverage disputes between the company and its policyholders that has reached the litigation stage." The outcome of such litigation is far from certain, as courts have reached inconsistent conclusions with respect to the existence of insurance coverage for environmental claims. Consequently, although the FAS 5 recognition criteria may have been met from the perspective of the polichyholder, it is by no means certain that recognition is required, or even appropriate, by the insurer.

Limited recognition and disclosure, on the part of both insurers and insureds, can at least partially be attributed to difficulty in establishing the existence of a potential liability, and to additional difficulties with respect to quantifying the amounts involved. The latter involves issues related to measurement, discussed below.

Measurement Uncertainty

Given the existence of a present obligation, recognition is required when its amount is reasonably estimable, with the accrual being equal to the best available estimate. When only a range of estimates is available, and no amount within the range can be considered a better than any other amount, accrual of at least the minimum of the range is required (FASB Interpretation (FIN) No. 14; CICA 3290; IAS 10).

The process of measurement involves a number of factual determinations and qualitative judgements. At issue are the costs to be included or excluded from the estimate, the measurement basis to be applied, the precision with which the estimates can be made,

and the materiality of the estimated amount to the financial statements as a whole. Although an item may appear to meet the tests of both relevance and materiality, technological, legal and other uncertainties may still support a conclusion that the estimation process is not sufficiently reliable to support financial statement recognition.

A number of surveys have indicated that difficulties in measurement dominate the probability of existence in determining whether to recognize a liability. Of the 500 largest U.S. companies, 23 per cent disclosed information on superfund status in 1989, with few providing detailed disclosure. Others "broadly admitted" their potential liabilities in unstated amounts (Biersach, 1991). Similarly, Price Waterhouse (1992) reported that "62 percent of respondents indicate that known environmental exposures exist at their companies which have not been accrued because the FAS 5 criteria remain unmet."

The SEC has taken some action to limit the opportunities for non-recognition on the basis of estimation uncertainty. Staff Accounting Bulletin 92 (SAB 92) states "management may not delay recognition of a contingent liability until only a single amount can be reasonably estimated," reminding preparers that once the existence of a liability is established, its amount is unlikely to be zero. Consequently, recognition of an amount at least "equal to the lower limit of the range is necessary even if the upper limit of the range is uncertain" (SAB 92).

In estimating the amount of the liability, SAB 92 requires consideration be given to all available facts and circumstances at the financial statement date. This includes information gained from prior experience with environmental matters, existing technology,

presently enacted laws and regulations, and consideration of the likely effects of inflation, societal and other economic factors in making the necessary estimates.

Certain characteristics have been identified as having a significant practical influence on the process of estimation. These involve the nature of the source of environmental damage—chemical composition, site characteristics, the degree of or potential for migration off site, etc.; the number of regulatory agencies that have asserted or may assert authority with respect to a specific site; the number and financial viability of other parties that may be held liable to bear a portion of the costs; and the potential for recovery from insurance companies. These variables identify a number of separable issues, but in considering their influence on the process of measurement, the potential for interaction among them is clear.

Assessing the degree of site complexity requires the application of scientific analysis and judgement. The extent of the problem depends, in part, upon the number, types and concentration levels of specific compounds present. Response costs, in turn, depend upon the availability of existing technology and its effectiveness in reducing or eliminating the identified hazardous substance or substances. Where alternative technologies exist, there is a question as to which should be employed: the Best Practical; Best Conventional, or Best Available technology for treatment (Clean Water Act (CWA): 33 U.S.C. 1251 et seq.).

Selection of an appropriate technology depends, in turn, on the standards imposed at a particular site. This issue is, however, contentious in that specific standards may not have been set for a given chemical compound, leaving doubt as to the extent of cleanup to be undertaken. Language in the Clean Water Act is illustrative: "Where no standards are established, EPA or state agencies apply 'best professional judgment' to set standards for a

site based on available data on known pollutants in the discharge" (CWA: 33 U.S.C. 1251 et seq.) Further, the number of regulatory agencies that may assert jurisdiction can complicate the selection of an appropriate response strategy. Again, language in the CWA is illustrative: "[E]ven if an operation meets effluent discharge limitations, more stringent requirements may be imposed if it is determined that the discharge may violate state water quality standards or federal water quality criteria for receiving waters" (US CFR V40 part 122 (1988)).

The SEC specifically notes that a RI/FS is intended to determine the "extent of contamination, evaluate remediation alternatives for removal, treatment, destruction and monitoring the hazardous materials and recommend a remediation action plan, including a cost estimate" (SAB 92). A major conclusion is that: "As a result of the RI/FS, two major variables of the clean-up process, remediation method and related costs, are reasonably determinable." It appears that, barring compelling circumstances, delaying recognition beyond the point at which a RI/FS is completed may no longer be acceptable to the SEC.

While completion of the RI/FS may be the latest point at which recognition should occur, comments made elsewhere in SAB 92 clearly indicate the Commission's position favoring earlier recognition. Specifically, SAB 92 states that:

> Information necessary to support a reasonable estimate or range of loss may be available prior to the performance of any detailed remediation study. Even in situations in which the registrant has not determined the specific strategy for remediation, estimates of the costs associated with the various alternative remediation strategies considered for a site may be available or reasonably estimable.

A further complicating factor in measuring the amount of loss is the imposition of strict, joint, and several liability under CERCLA. Where more than one party has

contributed to damage at a site, each is responsible for at least a proportionate share of the total costs. The potential does exist, however, for a single PRP to be held liable for amounts far in excess of its proportionate contribution to the problem. Consequently, measurement of the liability must consider the total costs of clean-up, the entity's likely proportionate share of the total, and the probability that "excess" costs may be assigned as a result of financial incapacity of one or more named PRP's or the inability to identify all PRP's contributing to the environmental damage. For the purpose of financial statement presentation, this raises a serious question regarding the amount to be reported, i.e., with or without consideration being given to amounts that would otherwise be assignable to other PRP's. On this question, the SEC has adopted the position that

> If it is probable that other responsible parties will not fully pay costs apportioned to them, the liability that is recognized by the registrant should include the registrant's best estimate, before consideration of potential recoveries from other parties, of the additional costs that the registrant expects to pay. Discussion of uncertainties affecting the registrant's ultimate obligation may be necessary if, for example, the solvency of one or more parties is in doubt or responsibility for the site is disputed by a party. A note to the financial statements should describe any additional loss that is reasonably possible [SAB 92].

Having been named a potentially responsible party (PRP) by the EPA does not conclusively establish legal responsibility with respect to a given site. Rather, it raises a rebuttable presumption that such liability exists. The quality and comprehensiveness of records maintained by an entity concerning the generation, transport and disposal of hazardous substances may be critical in reducing the uncertainties, particularly if these records can establish a *de minimis* contribution to the overall environmental damage.

A similar question arises when potential recoveries from insurers are considered. This point is explored further in the section following.

Measurement Bases:

Three main questions arise in connection with the selection of an appropriate basis for measuring the amount of environmental costs to be reported in the financial statements. First, should these amounts reflect consideration of possible recoveries from other responsible parties or from insurers? Second, if the costs of an environmental response are to be borne over a number of years, should the reported amounts reflect the time value of money? Third, when an environmental cost results from an impairment of asset value, what reference point(s) should be used in measuring the loss of value?

It has been common practice to report many liabilities net of anticipated recoveries. Under GAAP, for example, loss and loss adjustment reserves are reported net of anticipated salvage and subrogation. Doing so requires that the criteria for recognition be met with respect to both the liability and the related asset (receivable). Recently, however, concerns have been raised that the practice of netting may have been too aggressively applied, i.e. offsetting probable losses with (only) likely recoveries. In SAB 92, the SEC has made it clear it believes "separate presentation of the gross liability and related claim for recovery in the balance sheet most fairly presents the potential consequences of the contingent claim on the company's resources and is the preferable method of display." This position is supported by the consensus opinion reached by the FASB's Emerging Issues Task Force (EITF) in Issue 93-5, that "an environmental liability should be evaluated independently from any potential claim for recovery," and that "any loss arising from the recognition of an environmental liability should be reduced by a potential claim for recovery only when that claim is probable of realization."

The practice of reporting environmental losses net of insurance recoveries has recently received explicit attention. Of particular concern is the apparent disappearance of a significant amount of liability as insureds implicitly recognize insurance recoveries in the process of netting, while insurers have not recognized an equivalent amount on the basis that either coverage does not extend to these losses (the potential liability fails to meet the existence test) or that "there are too many uncertainties to estimate their potential liabilities for environmental losses within any accepted degree of accuracy" (Foppert, 1993).

In response, the SEC has adopted a position intended to limit this practice, declaring that "risks and uncertainties associated with a registrant's contingent liability are separate and distinct from those associated with its claim for recovery from third parties" (SAB 92). A consequence of this position may be the restoration of some symmetry in the disclosure of environmental liabilities by insurers and insureds.

Existing accounting standards generally support the position taken by the SEC. Accounting Principles Board Opinion No. 10 proscribes offsetting liabilities and related receivables except in those cases where a right of set-off exists. Financial Accounting Standards Board Interpretation No. 39, "Offsetting of Amounts Relating to Certain Contracts," further supports the position favoring a more comprehensive application of the prohibition against setoff. For SEC registrants, "the presentation of liabilities net of claims for recovery will not be appropriate after the provisions of FIN 39 are required to be applied in financial statements."[2]

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[2]The provisions of the Interpretation are effective for financial statements prepared for fiscal years beginning after December 15, 1993.

While these restrictions are, at present, unique to the United States, there are indications that similar prohibitions will be more universally applied. Although Canadian accounting standards do not advocate offsetting expected recoveries against the related liability, CICA section 3290.11 states: "A likely loss to an enterprise may be reduced or avoided by a counter-claim or a claim against a third party. In such a case, the amount of the likely recovery is an element of the likely loss and would, therefore, be taken into account in determining the amount to be accrued."[3] There is, however, an outstanding exposure draft, "Contingent Gains and Losses" (CICA 1993) that would treat the claim or counter-claim as a contingent gain. Under the proposed standard, the contingent gain would only be recognized if its realizability were virtually certain. If adopted, this standard would bring U.S. and Canadian GAAP into closer accord on this issue.

Where an environmental liability may require cash outlays to occur over a number of years, serious consideration may be given to valuing the liability at its present value. Although not common in practice, EITF 93-5 addressed the issue, stating a conclusion that "discounting an environmental liability for a specific clean-up site to reflect the time value of money is appropriate only if the aggregate amount of the obligation and the amount and timing of the cash payments are fixed or reliably determinable for that site." If the requirements for discounting are met, the SEC maintains the position that the appropriate rate is either that which would produce an amount for which liability "could be settled in an

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[3]IAS 10 (par. 11) contains similar wording: "A potential loss to an enterprise may be reduced or avoided because a contingent liability is matched by a related counter-claim or claim against a third party. In such cases the amount of any accrual may be determined after taking into account the probable recovery under the claim."

arm's-length transaction with a third party," or, if that rate is not readily determinable, a risk-free rate on securities with comparable maturities in accordance with paragraph 4(a) of FAS 76, "Extinguishment of Debt." Where a liability is presented on a discounted basis, any related claims for recoveries should also be discounted.

Environmental losses related to declines in asset value present another troublesome set of challenges. In the general case, any decline in asset value that is considered to be "other than temporary" requires the immediate recognition of a loss. With respect to declines in the value of owned assets, it is necessary to establish a reference point from which the amount of the loss is to be measured. Where the loss results from an event that is "sudden," there is no conceptual problem in measuring the loss from a point just prior to its occurrence. Alternatively, where the loss in value has occurred gradually over a period of time, it may be difficult, if not impossible, to establish a reference point just prior to the "occurrence." The issue is not simply one of timing, as the choice also has a bearing on whether the costs of remediating the damage will be properly categorized as repairs, betterments, or losses. How these costs are ultimately categorized may be affect whether or not insurance coverage extends to the specific costs, and may also affect the treatment of these costs for tax purposes.

A consensus was reached by the EITF (Issue No. 90-8) that capitalization of environmental costs is appropriate only if the costs are recoverable (through future operation or subsequent sale of the asset) provided that one of the following criteria is met:

1. The costs extend the life, increase the capacity, or improve the safety or efficiency of property owned by the company. For purposes of this criterion, the condition of that property after the costs are incurred must be improved as compared with the condition of that property when originally constructed or acquired, if later.

2. The costs mitigate or prevent environmental contamination that has yet to occur and that otherwise may result from future operations or activities. In addition, the costs improve the property compared with its condition when constructed or acquired, if later.

3. The costs are incurred in preparing for sale that property currently held for sale.

The EITF noted that where contaminated soil is processed to remove existing contaminants, the activity neither extends the useful life of the property, nor does it improve its efficiency relative to its unimpaired condition at acquisition. In addition, while the activity addresses an existing problem, it does not mitigate or prevent future contamination. Consequently, the costs may not be capitalized for financial reporting purposes.

Required Financial Statement Disclosures

Both accurate and complete disclosure are necessary to assure that the financial statements are not misleading to investors, creditors and other users. Efforts to accelerate the recognition of environmental liabilities are primarily motivated by this need. In addition, certain disclosures may serve as early warnings to financial statement users of economic events and circumstances that may adversely affect an entity's ability to generate favorable cash flows.

Contingent losses whose existence is not sufficiently probable, or its measurement is not sufficiently reliable to require accrual and recognition in the body of the financial statements may still require disclosure in either the footnotes to the financial statements,

Management's Discussion and Analysis, or both if its probability of existence is more than remote. Under both U.S. and international accounting standards, the nature of the contingency and an estimate of the possible loss or range of loss, or a statement that such an estimate cannot be made is required in the notes to the financial statements (FAS 5; IAS 10). Under Canadian GAAP, the disclosures extend to losses that are "unlikely" provided that, if confirmed, "would have a significant adverse effect on the financial position of an enterprise" (CICA 3290.17).

Staff Accounting Bulletin 92 provides additional detailed guidance to SEC registrants. The basic premise underlying this SAB is that

> product and environmental liabilities typically are of such significance that detailed disclosures regarding the judgments and assumptions underlying the recognition and measurement of the liabilities are necessary to prevent the financial statements from being misleading and to inform readers fully regarding the range of reasonably possible outcomes that could have a material effect on the registrant's financial condition, results of operations, or liquidity.

This SAB provides detailed guidance for the disclosure of environmental loss contingencies that is far more comprehensive than that provided in FAS 5. Specific examples of disclosures that may be necessary include:

- Circumstances affecting the reliability and precision of loss estimates.
- The extent to which unasserted claims are reflected in any accrual or may affect the magnitude of the contingency.
- Uncertainties with respect to joint and several liability that may affect the magnitude of the contingency, including disclosure of the aggregate expected cost to remediate particular sites that are individually material if the likelihood of contribution by the other significant parties has not been established.
- Disclosure of the nature and terms of cost-sharing arrangements with other potentially responsible parties.

- The extent to which disclosed but unrecognized contingent losses are expected to be recoverable through insurance, indemnification arrangements, or other sources, with disclosure of any material limitations of that recovery.

- Uncertainties regarding the legal sufficiency of insurance claims or solvency of insurance carriers. (Where registrants can rebut the presumption that no asset be recognized for contested claims for recovery) registrants should disclose the amount of recorded recoveries that are being contested and discuss the reasons for concluding that the amounts are probable of recovery.

- The time frame over which the accrued or presently unrecognized amounts may be paid out.

- Material components of the accruals and significant assumptions underlying estimates.

Further, registrants are cautioned that

> a statement that the contingency is not expected to be material is not sufficient ... if there is at least a reasonable possibility that a loss exceeding amounts already recognized may have been incurred and the amount of that additional loss would be material to a decision to buy or sell the registrant's securities. In that case, the registrant must either (a) disclose the estimated additional loss, or range of loss, that is reasonably possible, or (b) state that such estimate cannot be made.

These requirements are in addition to those disclosures that must be made outside the financial statements. Items 101 (Description of Business), 103 (Legal Proceedings), and 303 (Management's Discussion and Analysis) of Regulations S-K and S-B govern such disclosures. Securities Act Release No. 6130 (September 27, 1979) and Financial Reporting Release (FRR) No. 36 (May 18, 1989) are two interpretive releases that provide additional guidance with respect to environmental matters.

Disclosures made in light of this guidance "should be sufficiently specific to enable a reader to understand the scope of the contingencies affecting the registrant." This would include discussion of past and anticipated expenditures, with separate descriptions of

(a) recurring costs associated with managing hazardous substances and pollution in on-going operations,

(b) capital expenditures to limit or monitor hazardous substances or pollutants,

(c) mandated expenditures to remediate previously contaminated sites, and

(d) other infrequent or non-recurring clean-up expenditures that can be anticipated but which are not required in the present circumstances.

Disaggregated disclosure describing accrued and reasonably likely losses with respect to specific environmental sites may be necessary if their amounts are individually material. In addition, "if management's investigation of potential liability and remediation cost is at different stages with respect to individual sites, the consequences of this with respect to amounts accrued and disclosed should be discussed."

Disincentives to Disclosure

Earnings pressures and tax considerations have been identified as two of the most important disincentives to the recognition and disclosure of environmental costs (U.N., 1991c). In general, insurers and non-insurers alike are subject to their influence.

Both earnings pressures and tax considerations can combine to create strong disincentives to recognition. The consensus reached in EITF 90-8 (discussed previously) generally favors the recognition of environmental costs as current period expenses rather than as assets. Specifically, the EITF argues against the capitalization of costs associated with the removal, treatment, and replacement of contaminated soil. Consequently, the full income statement effect of these costs would be reflected in the year in which they are recognized.

The U.S. Internal Revenue Service reached a different conclusion in Private Ruling 9315004 issued in December 1992. In that ruling IRS argued that the costs of soil removal

and replacement necessitated by PCB contamination is not deductible under section 162(a) of the Internal Revenue Code. This section allows a deduction for ordinary and necessary expenses paid or incurred during a taxable year. In arguing against deductibility, IRS noted that

> Pursuant to section 161 of the Code, the deductibility of expenses under section 162 is subject to the provisions in section 263. Section 263(a) of the Code provides that no deduction shall be allowed for any amount paid out for permanent improvements or betterments made to increase the value of any property or estate, or for any amounts expended in restoring property. Deductions are exceptions to the norm of capitalization.

Further, the IRS relied upon section 1.162-4 of the Income Tax Regulations which allows a deduction for a *repair cost* only if all of the following conditions are met: the repair is incidental; the cost of the repair does not materially add to the value of the property; the repair does not appreciably prolong the useful life of the property; and the purpose of the expenditure is to keep the property in ordinarily efficient operating condition.

In the specific case under discussion, IRS argued that soil removal and replacement failed the test for deductibility on several points. The scale of the activity precluded characterizing the activity as incidental; the costs expended could be expected to increase the value of the property relative to its value as contaminated property just prior to the commencement of remediation activities; and the removal of a known hazard increased the safety of operations carried out at the site. Further, the IRS placed significant weight on the fact that remediation activities were undertaken as a part of a comprehensive plan of rehabilitation. In summary, the IRS argued a position that would categorize such activities as betterments, rather than repairs—a position clearly at odds with financial accounting treatment of the same costs. Should this position be pursued and subsequently upheld by the

courts, it would create an additional financial disincentive for business enterprises to undertake prompt and comprehensive responses to environmental problems.[4]

Insurers are faced with specific disincentives with regard to recognizing and disclosing environmental loss reserves. First, earnings pressures work against accelerated recognition. The recognition of additional liabilities, whether to establish a reserve or strengthen an existing reserve, reduces both earnings and surplus. Though the effects would not be felt equally across insurers, there is the potential for such adjustments to affect rating agency perceptions of insurer strength and performance, and may, at the margin, limit the capacity of an insurer to write new business.

Second, there is concern that detailed disclosure may compromise an insurer's chances of successful litigation "both in terms of appearing to admit liability and of having the deep pockets to cover it" (A.M. Best, 1994). Third, measurement uncertainties include not only the uncertainties involved in estimating the underlying liabilities of claimants, but also the uncertainties associated with the outcome of litigation involving coverage disputes. Together, these uncertainties may make it difficult to defend the tax deductibility of reserves against an IRS challenge on the basis that reserve amounts appear excessive (A.M. Best, 1994).

The Future

The current state of financial reporting for environmental costs might best be described as unsettled. Standard setters have yet to give environmental reporting issues high

[4]A revenue ruling has since been issued that may substantially modify this position. Details were not available in sufficient time to be incorporated into this paper.

priority. While the accounting profession recognizes the financial significance of environmental costs, the majority appears to hold that the accounting for these costs involves no new theoretical issues, and the accounting guidance in FAS 5 is sufficient. Consequently, the likelihood that FASB involvement with environmental issues at the standard-setting level is, at least in the near term, relatively low. Situation specific accounting questions will continue to be delegated to its Emerging Issues Task Force. To date, no specific requirements have been imposed on insurers with respect to the preparation of statutory accounting statements.

In contrast, the SEC has taken a leadership role in attempting to close the gap between the quality of disclosure demanded by financial statement users, and that being provided by financial statement preparers. It has made clear its intentions to actively monitor registrants' disclosures, and question registrants when it believes that disclosure is incomplete. Although there has yet been no action, the U.S. General Accounting Office has recommended that the SEC revise its guidance "to specifically address insurance companies' disclosure of environmental liabilities," including the disclosure of the number of reported claims and "an estimated range or minimum amount of associated claims costs and expenses" (GAO, 1993).

There is some evidence that financial statement preparers have begun to respond to demands for a more complete accounting of environmental costs. The Price Waterhouse surveys results discussed previously suggest that non-insurance enterprises are accelerating the recognition of environmental liabilities. Corresponding action by insurance companies is, however, not in evidence. Of the 16 largest publicly held property-liability companies, only

three separately disclosed the costs associated with environmental liability claims in their original 1991 SEC filings (GAO, 1993).

Litigation costs are likely to take on increasing importance to insurers. Despite the insurance industry's vigorous denial of environmental claims, more companies are reporting that they consider potential insurance recoveries in estimating their environmental liabilities. From 1990 to 1992, the percentage of companies considering insurance recoveries rose from 21 to 69 percent; fully 88 percent indicate they believed recovery to be probable (Price Waterhouse, 1992). The potential for increased litigation activity is apparent, as is the potential for the associated costs to be substantial. Aetna, for example, reported in 1993 that two-thirds of its $231 million reserve for environmental claims "represents a bulk reserve for legal fees." Insurers will no doubt be under increasing pressure to recognize and disclose at least this component of their potential environmental liability.

Continued improvements in financial reporting will depend, in large part, on the development of more detailed data. Environmental auditing activities are increasingly being viewed as an appropriate response to environmental concerns. The Canadian Institute of Chartered Accountants has formally taken up the issue of accountants' role in such activities. Specialized environmental consulting services are now available from a number of national accounting firms. In Europe, environmental auditing activities are becoming more formalized. On June 29, 1993 the EC Council formally adopted a Regulation (1836/93) for the introduction of a voluntary Eco-Management and Audit Scheme. Movement is clearly toward the provision of more detailed, and more focused environmental information.

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