Disclosure Requirements for Mass Torts

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DISCLOSURE REQUIREMENTS FOR MASS TORTS

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ABSTRACT

The Securities and Exchange Commission (SEC) and state insurance departments have added increased disclosure requirements for companies with environmental and asbestos (E&A) exposures. For insurance companies, Note 24 of the annual statement requires disclosure of recent E&A payments and reserves. For insurers and non-insurers, the SEC has issued Staff Accounting Bulletin (SAB) No. 92. SAB 92 among other things requires a disclosure of the amount accrued for E&A and the amount of reasonably possible losses in excess of the amount accrued.

The first section of the paper reviews the new disclosure requirements for insurance companies and outlines benchmark ratios which rating agencies and regulators will use to measure E&A reserve adequacy. Specifically, we provide a benchmark analysis based on the newly published Note 24 information for several primary companies and reinsurers. We also outline the differences in ratios for environmental and asbestos and for primary companies versus reinsurers. However, it should be kept in mind that simple analyses of ratios will have several shortcomings which we discuss.

The next section describes the general methods which rating agencies use to measure an insurance company's E&A reserve adequacy. Also, limitations with the standard ratio analysis and the need to factor in additional items are discussed. Trends are extrapolated to the future and likely future reserve additions are projected.

The last section of the paper outlines the disclosure requirements for non-insurers. We also sample a number of 10K's to observe trends in disclosures. Specifically, we compare various statistics for different time periods: the percentage of companies which disclose an accrual amount; the percentage of companies which discount their liabilities; etc.

DISCLOSURE REQUIREMENTS FOR MASS TORTS

Introduction

Recent studies conducted by various groups such as Standard & Poor's (S&P), A.M. Best and the American Academy of Actuaries indicate that the magnitude of ultimate environmental and asbestos (E&A) liabilities for U.S. insurers may not be as devastating as thought a few years ago. This favorable trend is largely due to a reduction in the estimate for environmental liabilities. In its January 1996 study, A.M. Best estimated that the U.S. insurance industry's ultimate cost for environmental liabilities will be $66 billion (significantly less than the $255 billion estimated in their March 1994 study). In contrast, A.M. Best's estimate of ultimate costs for asbestos of $40 billion is virtually unchanged from its March 1994 study. S&P's comparable estimates are $85 billion for environmental liabilities and $45 billion for asbestos liabilities. The decrease in projections for environmental liabilities is attributable to a number of factors including:

- a decrease in the projected ultimate number of sites on the national priority list (NPL);
- a decrease in the estimated average cost per site; and
- lower projected NPL transaction costs (these are largely legal expenses).

Therefore, S&P's and others' recent studies have produced estimates of E&A liabilities which are more manageable for insurers. The concern has now shifted from the devastating impact that E&A liabilities could have on the entire insurance industry, to the impact that E&A liabilities could have on a handful of insurers who either have a large amount of exposure or are not managing their exposure. Rating agencies and regulators are now focusing their attention on ways to identify these companies.

One obstacle third parties face in evaluating a company's E&A liabilities is the lack of information available with which to assess each company's E&A reserve levels. Until recently, there have been no specific E&A disclosure requirements for all insurers.[1] However, beginning with the year-end 1995 statutory annual statements, each insurer is required to provide information regarding its measurement of E&A liabilities. Specifically, Note 24 of the annual statement requires disclosure of E&A payments and reserves.

Additionally, over the past several years, the Securities and Exchange Commission (SEC) has increased its scrutiny of registrants' disclosure requirements. The SEC began to notice in the early 1990's that many public companies (non-insurance companies) took the position that their net liability was insignificant because most of their environmental liabilities will be covered by

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[1] The SEC increased its attention on disclosure issues for stock insurers. However, mutual insurers were not required to specifically report information on E&A liabilities in their annual reports.

insurance policies. However, insurance companies claimed that their policies excluded coverage for cleanup of hazardous waste sites. This led the SEC to require more extensive disclosures for insurers and non-insurers. Specifically, the SEC issued Staff Accounting Bulletin No. 92 (SAB 92) in June of 1993 to clarify the SEC position with regard to accounting for and disclosure of contingent liabilities.

In the remainder of this paper, we will:

- discuss the specific disclosure requirements for insurers and non-insurers;
- provide summaries of information disclosed by sample groups of insurers and non-insurers;
- describe some ways that third parties may use Note 24 information to measure a company's E&A reserves;
- discuss the limitations of using Note 24 information to analyze a company's E&A reserves; and
- provide a rating agency's perspective of E&A exposure issues.

I) E&A Disclosures for Insurers

As of year-end 1995, Note 24 to the Statutory Annual Statement required companies to disclose their historical payments and reserves separately for asbestos and environmental liabilities.[2] This information has never before been publicly available. Rating analysts, insurance regulators and actuaries will now be better able to determine the relative reserve adequacy of various insurance companies through year-end 1995. Analysts can compute several ratios for both the company and the industry. Several commonly used ratios include:

- Survival Ratio;
- Reserve Ratio;
- Premium Ratio[3]; and

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[2] Exhibit 1 displays the instructions for filling out Note 24.

[3] The premium ratio is not available from Note 24 but rather is available from various publications. The premium ratio can be analyzed in combination with the reserve and payment ratio (which are available from Note 24).

- Payment Ratio.

The survival ratio is defined as a company's reserves divided by its calendar year payments. This ratio measures how many more years of payments the reserves can support, assuming future year payments are equal to the current calendar year payments.

The next measure is the reserve ratio. The reserve ratio is the company's current reserves relative to industry reserves for E&A claims. This ratio should be viewed in combination with other ratios such as the premium ratio and the payment ratio. If a company's exposure as measured by the premium ratio is relatively low, and the company's payment ratio is relatively low, a low reserve ratio would not indicate a reserve deficiency. However, if the reserve ratio is significantly below either the premium ratio or the payment ratio, then a potential reserve deficiency may be indicated.

The premium ratio measures the amount of premium written by the company relative to the industry, which would expose it to E&A claims, during the exposure period. It is generally assumed that policies written between 1960 and 1980 for general liability will expose a company to E&A claims. Therefore, one measure of an insurance company's exposure to E&A losses is the company's written premium for general liability between 1960 and 1980. The relative exposure of the company can be computed by dividing its written premium by the written premium for the industry. As a technical note, the relative exposure can also be used as a starting point in projecting ultimate E&A losses via a market share method[4].

The last ratio we will discuss is the payment ratio. This ratio is the calendar year E&A payments of the company related to the calendar year E&A payments of the industry.

The attached Exhibits 2-5 display the four above mentioned ratios for several of the largest reinsurers and primary companies separately for asbestos and environmental.

Survival Ratios

Table 1 displays average survival ratio statistics for 1995 from Exhibit 2.

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[4] See "Estimation of Liabilities Due to Inactive Hazardous Waste Sites" by Raja Bhagavatula, Brian Brown, and Kevin Murphy, CAS Forum Summer 1994.

Table 1	
Average Survival Ratios For Selected Companies	
Environmental	
Reinsurers	17.1
Primary Insurers	6.3
Asbestos	
Reinsurers	8.8
Primary Insurers[5)]	9.5

We can draw some preliminary observations from the above table:

- As expected, the average survival ratio for environmental liabilities for reinsurers of 17.1 is significantly greater than the average survival ratio for primary insurers of 6.3;

- As expected, the average reinsurer survival ratio for environmental liabilities of 17.1 is greater than the reinsurer survival ratio for asbestos of 8.8. We would expect a higher proportion of ultimate losses to have been paid for asbestos relative to environmental and therefore the future reserve for asbestos to be less than the future reserve for environmental;

- Unexpectedly, the primary company survival ratio for environmental liabilities of 6.3 is below the primary company asbestos ratio of 9.5. There are several possible explanations of this unexpected result. For example, it is possible that companies can better quantify their asbestos liabilities, due to the fact that asbestos exposures are more mature than environmental exposures. Alternatively, asbestos case law is more fully defined than environmental case law. Many companies may be assuming that future favorable decisions with regard to environmental coverage issues will help to decrease the needed reserves (due to court cases concluding that CGL policies do not afford coverage under Superfund or comparable state laws). Other factors could also lead to the above unexpected relationship: specific insureds, limits of coverage provided, reinsurance programs, years of coverage, etc.

[5)] Excludes one company which is known to have participated in a large asbestos settlement.

- Also unexpectedly, the asbestos survival ratio for primary insurers of 9.5 is higher than the ratio of 8.8 for reinsurers. This could be due to some of the factors mentioned above. Also, it may be more difficult for reinsurers to quantify their exposure (due to the payment and primary company reporting lags).

Note that our analysis is based on a sample of companies. Review of the disclosure for all companies may produce different results.

Other Ratios

There is a wide variation in the ratios from company to company. This variation can lead to differing interpretations. Caution must be used when analyzing this information to assess a company's reserve strength. To illustrate, we have extracted ratios for four companies and will discuss various ways to use this information. Table 2 displays these ratios for the environmental liabilities of four reinsurers:

Table 2

1995 Financial Ratios - Select Reinsurers

Company	Survival Ratio	Reserve Ratio	Premium Ratio	Payment Ratio
A*	43.0	3.90%	0.20%	0.73%
B*	14.4	2.06	0.60	1.16
C*	10.9	6.26	1.40	4.62
D*	3.6	0.23	0.50	0.53

* The carriers' ratios have been adjusted by a scaling factor to protect their identity.

As the table shows, the companies we selected have a wide variation in their ratios. This could mean that the companies have widely different exposures to loss which the above ratios cannot measure. However, the variation may be interpreted as indicating that some carriers are taking a more pro-active stance in establishing ultimate environmental claim reserves. As Table 2 displays, Company D's premium ratio is 0.50% and its payments ratio is 0.53%, whereas its reserve ratio is 0.23%. This may imply that Company D's:

- 1995 payments are not representative of future activity;

- claims department has been active in making payments to reduce its future exposure (e.g., through commutations);

- reserves are below its peers' reserves; or

- premium share and payment ratios do not measure its exposure to environmental reserves.

To establish reserves, some reserving analysts are benchmarking company reserves based on analysis of industry or peer group companies. For example, Table 1 shows that the average 1995 survival ratio for the selected primary insurers is 6.3 for environmental liabilities. Based on this, if a company's most recent calendar year payments were $10M, it may establish a reserve of $10M x 6.3, or $63.0M. This company may believe it is adequately reserved since it has used industry average ratios in estimating its reserves. However, it is generally believed and documented in A. M. Best's recent study titled "P/C Industry Begins to Face Environmental and Asbestos Liabilities" that, on average, carriers have not yet fully addressed asbestos and environmental exposures. Thus, this procedure will result in inadequate reserves on average.[6)]

There are several factors that could lead one to the wrong conclusion when utilizing industry average factors. For example:

- The level of E&A exposure will depend on the limits of insurance written. It is generally believed that exposure to E&A liability claims will arise more out of primary layers for pollution than for asbestos. Therefore, carriers writing high limits of reinsurance (e.g., above $5M or more) may not be exposed to the degree that their premium share will indicate for pollution claims.

- The type of insured will heavily influence the needed environmental reserves. Several large Fortune 500 Corporations are named on a large number of NPL sites. These potentially responsible parties (PRP's) heavily expose carriers to liabilities, whereas smaller "Mom and Pop" type operations will not expose carriers to the same degree. Therefore, a carrier writing large accounts, especially those named at a number of NPL sites, may be exposed to more environmental claims.

[6)] One method to estimate reserves would be to estimate the carrier's premium ratio and multiply it by an estimate of the insurance industry's ultimate pollution losses. A.M. Best's recent study estimates pollution costs of $66.0 billion; S&P's study estimates pollution costs of $85.0 billion. If the carrier's premium ratio is 1.0%, this would imply ultimate pollution costs of $660 million or $850 million. This method is referred to as the market share method.

- One element which will affect a company's reserves as well as its payment ratio is the number of policy buy-outs or buy-backs used by the carrier. To the extent the carrier is buying policy limits back from its insureds, it is reducing its future E&A exposure. Therefore analysis of the payment ratio and reserve ratio for a carrier aggressively using buy-backs will produce misleading results.

- The use of specific policy language will affect the company's exposure to environmental losses. For example, in general the absolute pollution exclusion has been upheld. Therefore, the earlier the carrier adopted the absolute pollution exclusion the lower the needed reserve, all other factors being equal. Other policy contract provisions also will have a bearing on the court's interpretation with regard to insurance coverage applicability.

Comparison of a company's ratios may indicate conflicting conclusions with regard to relative reserve adequacy. For example, a company may have a high percentage of payments relative to the industry and relative to its reserves. One conclusion may be that the company's payment ratio is higher because it is exposed more heavily to large insureds. However, its payment ratio may be larger because it is using policy buy-backs or making payments on claims currently to reduce its future exposure. Thus, a high payment ratio may actually be an indication of relatively stronger or more aggressive management of environmental exposures than peer companies.

Environmental/Asbestos - A Rating Agency Perspective

Current estimates of calendar year 1995 strengthening for industry environmental and asbestos reserves range as high as $10 billion with a significant portion of the loss attributable to just a handful of companies. While this is an industry issue given the significant number of companies affected, it remains a very company specific problem. It is estimated that six insurers/reinsurers alone represent approximately $6 billion of the 1995 development.

Historically, adverse development for other and products liability for 1985 and prior accident years (which is represented largely by E&A) averaged between $2 billion and $3 billion annually for the industry. The acceleration in loss recognition in 1995 was due to several factors including increased pressure from shareholders, regulators and rating agencies, balance sheet restructurings and other forms of reorganization including mergers and acquisitions. All of these issues were aided by the increased availability of more useful information (both internal and external). *(Additionally, Note 24 in statutory annual statements provides payment and reserve statistics for insurers).* In addition, during 1995, many companies recognized considerable reserve redundancies for workers' compensation which helped to offset the charges taken for E&A as did robust investment returns.

Environmental and asbestos liabilities have been a major factor influencing claims-paying ability ratings in the property/casualty industry for a number of years. Exposure to E&A claims has

brought into question the capital adequacy, earnings power, and competitive positioning of the exposed companies. Rating agencies, faced with the high degree of uncertainty surrounding this issue, suffered as well as they appeared to be reactive to the problem rather than proactive.

Historically, an insurer's ability to determine their ultimate exposure to this issue has been hampered by the uncertainty surrounding the extent of pollution, the costs associated with clean-up and/or remediation, individual court interpretations and ongoing coverage disputes. As a result (at least through 1994), companies continued to hide behind the "unquantifiable" argument and therefore that no accurate determination of ultimate loss could be calculated. Many companies elected to fund this liability over time developing a pay-as-you-go mentality.

Insurers and rating agencies alike needed some form of standard or benchmark to compare the E&A reserve levels of one insurer against another. As a result, the ratio of carried reserves to paid losses or "survival ratio" was introduced as a de facto standard of measurement, built on the premise that insurers would fund this reserve deficiency gradually over time. This measure served as an early indicator and soon became the industry benchmark. As a result, companies focused their attention on maintaining a survival ratio comparable to their peers rather than trying to determine their ultimate exposure to this issue. Problems with using the unpaid to paid relationship as a standard of measure include inconsistencies in the claims handling practices of companies, the impact of large single claims, and the differences in reporting for excess versus primary layers of coverage. All of these problems make comparisons of individual companies' ratios very difficult.

The E&A issue, like most others, has been handled very differently by various management teams. Some have been very diligent while others have not. It is the task of the rating agencies to differentiate between these companies in their ratings. In all fairness many companies do not have a relatively significant exposure and therefore, extensive labor in this area would not be cost effective. However, other companies lulled themselves into a false sense of security and did not address the issue as aggressively as they should have.

In order to address these concerns, Standard & Poor's has developed an environmental/asbestos model based on a premium market share distribution. The intent of this model was not to develop an estimate of the industry's ultimate exposure for E&A, but rather what its implications were for individual insurers. An initial number for the industry's potential exposure to E&A was developed and then, based on a straight premium market share approach, S&P selected those companies that were potentially environmentally exposed to analyze in more detail.

This model has obvious shortcomings when applied to individual insurers as premium is not always a good measure of exposure. However, the modeling allowed for the development of an initial estimate that could be used in determining the exposure of individual companies. This early estimate was not made public given potential shortcomings in the model. It was shared with each

insurer and compared against their held reserves and a potential deficiency/redundancy was then calculated. Insurers were given the opportunity to explain any significant differences between the Standard & Poor's estimate and their current reserve position. Every company's exposure to E&A is different and dependent upon several factors including the company's list of potential insureds, what coverage's were provided and what years the coverage was in force. Other factors include reinsurance protection (both quantity and quality), as well as claim-handling practices. These are all recognized as factors in determining exposure that cannot be addressed through the use of a market share model.

Adverse development for environmental/asbestos will most likely continue during 1996 and beyond, although perhaps not to the single year magnitude that we saw in 1995. Currently, S&P's estimate of the remaining deficiency on a net present value basis is roughly $14.5 billion. While many other large national carriers increased reserves significantly and rating agencies view this action favorably, reserve strengthening for E&A is not over, barring any Superfund reform. There are several remaining large carriers that have not dealt with this issue as decisively as their peers. Some have the earnings power, financial flexibility and/or strong capital positions to absorb such a charge; others may not.

The next round of E&A strengthening will most likely consist of continued development for some large national carriers (in some instances due to specific exposures), smaller companies that either lack the resources to address this issue more diligently today or are unaware of potential significant exposures, and finally reinsurers.

Reinsurers represented a considerable share of the reserve strengthening taken in 1995 and early 1996. While the level of uncertainty surrounding this exposure for primary companies is staggering, it is even more difficult to gauge for reinsurers. This is particularly true for companies that wrote large amounts of treaty casualty with various layers of coverage provided. A significant level of the strengthening that was taken during 1995 and 1996 was related to facultative and direct excess exposures which are more quantifiable than treaty exposures.

In many ways, reinsurers are in a position very similar to that of primary companies just a few years ago. Current estimates of ultimate exposure are difficult to quantify, companies are in the process of evaluating what their peers are doing (our expectation is that Note 24 will help considerably in this area), and current methodology allows for a gradual funding over time. The expectation is that as more meaningful data becomes available to primary companies, this will filter down to reinsurers and most likely result in similar actions to those we saw on the primary side in 1995. Furthermore, as more meaningful information and modeling becomes available, both insurers and reinsurers should expect continued pressure from rating agencies to better quantify their exposure to E&A. In some cases, this could result in further negative rating actions.

E&A Disclosures for Non-insurers

The SEC has required publicly held companies to disclose E&A information in their 10K financial statements if the exposure is material. The disclosures are intended to provide information to potential investors to allow them to assess the extent of and the management of the company's E&A exposure. Many companies have taken the position that their E&A liabilities are covered by insurance policies, and their net liability is therefore immaterial. Insurers, however, have challenged these claims by arguing that their policies contain exclusions for E&A exposure.

The magnitude of the cleanup costs, the uncertainty associated with insurance recoveries, and the diversity of disclosure practices have led the SEC to increase its scrutiny of registrants' disclosure of environmental liabilities. The SEC staff issued Staff Accounting Bulletin No. 92 (SAB 92) in June of 1993 to clarify the SEC's position with regard to accounting for and disclosure of contingent liabilities.

SAB 92 revisits some of the existing requirements for disclosure of contingent liabilities such as those found in Financial Accounting Standards Boards Statement No. 5 (FASB 5). FASB 5 states that a contingent liability must be recognized when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. To clarify this statement, FASB issued Interpretation No. 14 (FIN 14), which indicates that registrants are not to delay accrual of a loss until a single amount can be reasonably estimated. If the company can estimate a reasonable range of possible loss amounts, the best estimate within this range should be recognized. If a best estimate is not determinable, the range minimum should be accrued as a liability. When quantifying accruals, SAB 92 requires that measurement be based on currently available facts, current laws and regulations, and existing technology. For example, registrants should not assume that improved remediation techniques will be developed and that future cleanup costs will be reduced.

In addition to disclosure of the amount accrued, companies are required to disclose the amount of reasonably possible losses in excess of the amount accrued as well as judgments and assumptions underlying the calculation of future costs.

SAB 92 also addresses other key issues relating to E&A liabilities: (1) the treatment of potential recoveries (through insurance or other sources) in financial statements; (2) the appropriate discount rate to be used for recording liabilities at a present value; and (3) recommended disclosures regarding contingent liabilities.

SAB 92 states that probable recoveries from insurance companies or other third parties should not be used to offset contingent liabilities. The balance sheet should present the gross amount of the liability. Registrants can separately recognize an asset representing recoveries only if the recoveries are probable and they explain why the recoveries are probable. The SEC's position

regarding the treatment of recoveries was strengthened by FASB's Interpretation No. 39 (FIN 39). Effective for fiscal years ending after December 31, 1994, FIN 39 indicates that the requirements for offsetting will be applied more stringently than in the past. It should be noted that this section of SAB 92 does not apply to insurance companies which estimate reinsurance recoveries in the normal course of business practice.

SAB 92 states that discounting is appropriate only if the amount and timing of the payments are fixed or reliably determinable. The discount rate to be used is limited to the rate on risk-free investments, with maturities corresponding to the expected payments.

Examination of Sample Data for Non-insurers

To assess the differences in reporting practices from company to company, we examined a sample of sixty 10K financial statements for fiscal years ending in 1993 and sixty 10Ks for fiscal years ending in 1994 (and 1995) filed by publicly held entities that have been named as PRP's at NPL sites. We selected companies that have been named as PRPs because it is highly probable that these companies have environmental exposures. According to the SEC's requirements, these companies should be disclosing estimates of their environmental liability. Whenever possible, we used the same companies in both our 1994 and 1993 samples. Our samples are equally divided between companies named as PRPs at 1-5 NPL sites (low exposure companies); 10-16 NPL sites (medium exposure companies); and 25 or more NPL sites (high exposure companies).

We examined the 1993 and 1994 (and 1995 when available) 10Ks to determine the current disclosure practices commonly being used and to determine whether or not any differences exist between companies with various exposure levels. Our samples also allowed us to ascertain the degree to which disclosure practices have changed in the last 2 to 3 years. Some of the key areas we focused on were: disclosure of the amount accrued for environmental liabilities (as required by FASB 5); disclosure of amounts in excess of the accrued amount that could reasonably become liabilities (as required by FASB 5); offsets for recoverables; and discounting to present value. If the discussion provided in the statements did not specifically indicate the amount of E&A liability accrued, we assumed that no accrual was made.

A summary of our findings for the four key areas described above is shown in Table 3. We first focused on the percentage of companies which specifically disclosed the amount of environmental liability included on their balance sheet. Our comparison of the low, medium, and high exposure groups suggests that companies with high environmental exposures are more likely to disclose this amount. In 1994 (and 1995), 90% of the high exposure companies disclosed a specific accrual amount greater than zero compared with only 45% of the low exposure companies. The second area we assessed is the disclosure of an amount in the excess of the accrual. The high exposure companies more frequently disclosed an amount of reasonably possible losses in excess of the

amount accrued as required in FASB 5. In 1994, 35% of the high exposure companies provided an excess estimate compared to about 15% of the low exposure companies.

For all three groups, the percentage disclosing accrual amounts or possible excess amounts is higher in 1994 than it was in 1993, perhaps because an increasing number of companies are making accruals for environmental liabilities. Another reason could be that companies are becoming more aware of the SEC's requirements and are providing clearer discussions of the environmental accruals included in their balance sheet.

TABLE 3

Percentage* of Companies	E&A Exposure Level					
	Low		Medium		High	
	1993	1994	1993	1994	1993	1994
Disclosing an accrual amount > $0	30%	45%	50%	60%	85%	90%
Disclosing an amount in excess of accrual	5	15	15	20	10	35
Disclosing that accrual is net of recoveries	5	0	15	0	20	5
Disclosing that liability is discounted	0	0	0	5	5	5

* % of companies included in sample

Our third area of focus relates to recoveries. As required by SAB 92 and FIN 39, accruals should be gross of third party recoveries. Only one company in our 1994 sample stated that accruals were net of insurance recoveries, compared to eight companies in our 1993 sample. This decrease again suggests that companies have become more aware of the SEC's requirements and are making appropriate changes to their financial statements.

Lastly, we found that very few companies discount their E&A liability. The few that do, only discount a portion of the operation and maintenance costs. These companies assumed discount rates of 5% - 8%.

For the sampled companies, we also summarized the size of accruals in total and relative to each company's equity. Table 4 shows that there is a wide variation in the accrual amount within each exposure level. As we would expect, these amounts generally increase by exposure level and are clearly significant for the high exposure companies.

Companies with a significant amount of potential liability seem more likely to specifically address FASB 5 and SAB 92 requirements than companies with a smaller relative amount of E&A exposure. However, there is a lack of uniformity in the presentation of E&A liabilities in the financial statements of publicly held companies. This lack of uniformity exists not only in the handling of recoveries and discounting, but also in the procedures used to estimate the amount of liability and the adequacy of such estimates. The SEC is concerned that inadequate information regarding E&A exposure may misrepresent a company's balance sheet.

It appears that the SEC's position on disclosure and estimation of environmental exposure is becoming more aggressive. We believe the trend will accelerate as the data published by the EPA becomes more complete, as the EPA and the SEC cooperate more closely, and as the SEC makes more frequent use of the data.

TABLE 4

E&A Exposure Level

	Low		Medium		High	
	1993	1994	1993	1994	1993	1994
Range of accrual (millions)	$8-$29	$0.1-$445	$2-$77	$3-$111	$90-$2,500	$52-$2,500
Range of accrual/equity	1.0%-11.2%	0.1%-10.0%	0.6%-18.5%	0.6%-14.8%	2.8%-61.3%	2.8%-55.0%

In future years actuaries may be called upon more frequently to estimate environmental liabilities for non-insurance companies. As the above table displays the estimated environmental accrual for one major non-insurer is $2.5 billion. This exceeds the reserve accrual for most insurance companies.

Conclusion

With the year-end 1995 annual statements more information is available to assist in evaluating insurance company's E&A exposure. Many interested parties will begin to perform reserve adequacy comparisons from company to company. However, without making adjustments for relevant factors affecting reserves (e.g., buy-out activity) these comparisons could prove to be faulty. Additionally, rating agencies will be more aggressive in their evaluation of insurance company E&A reserves.

It appears that non-insurance companies are complying with SEC regulations regarding environmental disclosure more fully. However, the liabilities are large and it is not clear that adequate methods are used to estimate accruals in all cases.

INSTRUCTIONS FOR NOTE 24

24. Asbestos/Environmental (Mass Tort) Reserves

Instruction:

If the company is potentially exposed to asbestos and/or environmental claims (mass tort), full disclosure of the reserving methodology for both case and IBNR reserves is required. Disclosure of the amount paid and reserved for losses and LAE for asbestos and/or environmental claims, on a gross and net of reinsurance basis, is also required.

Does the company have on the books or has it ever written an insured for which you have identified a potential for the existence of a liability due to asbestos and/or environmental losses? Yes ( ) No ( )
If yes, describe the lines of business written for which there is potential exposure, the nature of the exposure or exposures and the company's methodology for reserving for both reported and IBNR losses.

If yes, complete the following information, separately for asbestos-related and environmental losses (including coverage dispute costs) for each of the five most current calendar years on both a gross and net of reinsurance basis (more detailed breakdowns are acceptable):

Beginning reserves:	$ _____
Incurred losses and loss adjustment expenses:	_____
Calendar year payments for losses and loss adjustment expenses:	_____
Ending reserves:	$ _____

If yes, complete the following, separately for asbestos-related and environmental reserves:

Does the company hold reserves for unreported claims? Yes ( ) No ( )

Does the company hold reserves for future allocated loss adjustment expenses (including coverage dispute cost)? Yes ( ) No ( )

Definition of Environmental Loss –

Any loss or potential loss (including third-party claims) related directly or indirectly to the remediation of a site arising from past operations or waste disposal.

Examples of Environmental Exposure –

Chemical Waste
Hazardous Waste TSD Facilities (Treatment, Storage and/or Disposal)
Industrial Waste Disposal Facilities
Landfills
Superfund
Toxic Waste Pits
Underground Storage Tanks

Illustration:

Yes, Company XYZ has exposure to asbestos claims. The Company's exposure arises from the sale of general liability insurance.

Company XYZ tries to estimate the full impact of the asbestos exposure by establishing full case basis reserves on all known losses and computing incurred but not reported losses based on previous experience.

Company XYZ's asbestos related losses (including coverage dispute costs) for each of the five most recent calendar years were as follows:

Gross of Reinsurance –

	1991	1992	1993	1994	1995
Beginning reserves:	$1,000,000	$ 750,000	$ 950,000	$ 700,000	$ 400,000
Incurred losses and loss adjustment expense:	250,000	1,000,000	1,000,000	500,000	3,000,000
Calendar year payments for losses and loss adjustment expenses:	500,000	800,000	1,250,000	800,000	200,000
Ending reserves:	$ 750,000	$ 950,000	$ 700,000	$ 400,000	$3,200,000

Net of Reinsurance –

	1991	1992	1993	1994	1995
Beginning reserves:	$ 400,000	$ 300,000	$ 380,000	$ 280,000	$ 160,000
Incurred losses and loss adjustment expenses:	100,000	400,000	400,000	200,000	1,200,000
Calendar year payments for loss and loss adjustment expenses:	200,000	320,000	500,000	320,000	80,000
Ending reserves:	$ 300,000	$ 380,000	$ 280,000	$ 160,000	$1,280,000

Company XYZ holds IBNR and/or bulk reserves. It held such reserves in the amount of $1,000,000 on a gross basis and $400,000 on a net basis at December 31, 1995.

Company XYZ held $500,000 on a gross basis and $200,000 on a net basis for future allocated loss adjustment expenses (including coverage dispute cost) at December 31, 1995.

Exhibit 2A

Survival Ratios for Primary Insurers

Primary Insurers	Asbestos						Environmental					
	3 yr avg.	@12/95	@12/94	@12/93	@12/92	@12/91	3 yr avg.	@12/95	@12/94	@12/93	@12/92	@12/91
A	2.8	4.1	2.6	3.0	2.5	2.8	1.3	0.9	2.0	2.5	2.7	4.2
B	8.7	10.0	4.6	3.3	3.7	4.6	14.7	14.1	2.2	2.8	2.4	2.4
C	10.4	13.0	12.1	2.3	3.2	NA	15.8	11.7	8.6	6.7	4.2	NA
D	6.8	15.5	5.8	3.7	3.0	3.0	3.8	2.7	5.3	4.3	2.9	2.1
E	76.4	8.6	-9.9	53.7	1.5	19.0	10.6	9.1	6.2	11.4	17.7	12.3
F	6.7	5.3	2.3	5.0	3.0	4.4	10.0	6.8	4.1	3.1	1.6	2.6
G	NA	NA	NA	NA	NA	NA	7.0	7.5	4.7	6.0	1.5	1.2
H	3.9	4.3	4.3	3.2	5.0	2.9	5.9	7.2	3.7	2.4	4.1	4.3
I	4.0	4.1	4.7	3.3	4.7	3.1	5.9	7.1	3.6	2.4	4.1	4.1
J	11.2	19.8	8.6	9.3	11.0	50.9	9.7	14.2	7.5	4.9	5.3	10.8
K	5.7	5.6	4.8	5.7	13.1	12.3	3.8	2.3	6.6	4.7	3.0	5.6
L	20.6	21.0	13.7	7.7	7.1	5.6	16.9	17.6	13.2	7.4	8.2	11.4
Weighted Average	7.5	9.5	5.5	4.6	4.8	6.2	7.4	6.3	5.0	4.3	3.4	4.1

Exhibit 2B

Survival Ratios for Reinsurers

Reinsurers	Asbestos						Environmental					
	3 yr avg.	@12/95	@12/94	@12/93	@12/92	@12/91	3 yr avg.	@12/95	@12/94	@12/93	@12/92	@12/91
A	17.7	16.9	6.3	15.6	NA	NA	80.5	43.0	12.5	20 9	NA	NA
B	9 9	7.9	4.3	3.7	4.8	4.8	14.3	14.4	3.1	4.6	4.0	4.5
C	7.6	5.1	10.0	8.6	6.0	26.9	13.9	10.9	10.4	16.9	22.0	20.4
D	7.2	8.9	12.7	7.4	23 5	21.7	7.5	3.6	28.3	3.3	2.2	2.8
E	3.8	1.7	36.5	9.8	13.7	163.1	8.4	9.1	8.2	9.5	28.3	10.5
F	5.3	156.9	2.8	21.1	6.7	7.5	20.7	20.1	10.1	38.6	15.9	23.5
G	11.5	5.9	-25.1	3.2	6.9	1.3	9.1	4.5	49.4	8.7	11.7	13.1
H	-45 9	-5.7	37.4	6.7	8.2	66.6	-20.9	-4.6	16.1	14.1	33.0	13.0
I	5.6	3.3	8.3	11.2	7.4	NA	18.0	22.8	9.6	25.2	10.1	NA
J	23.0	33.8	13.0	25.0	22.9	12.9	7.4	18.4	3.2	20.7	10.2	7.6
K	6.5	4.2	5.7	9.8	7.8	2.3	22.7	16.4	9.5	46.0	18.7	7.7
L	4.4	NA	3.0	3.2	3.8	2.7	28.8	NA	-66.1	8.0	5.6	2.2
M	2.3	2.1	14.8	2.9	NA	NA	74.5	205.4	21.0	-2819.6	11.0	5731.0
N	3.8	2.5	3.6	11.2	2.8	2.1	15.8	8.8	11.9	107.6	77.7	1606.8
O	5.0	12.5	2.3	8.9	6.3	4.2	4.8	3.8	5.3	4.5	4.2	2.1
P	210.0	69.4	90.9	-84.7	8.1	20.0	72.3	152.1	38.2	26.7	40.3	40.2
Q	17.4	21.5	10.2	16.0	4.9	5.6	12.1	6.5	15.0	40.2	119.2	116.4
Weighted Average	9.7	8.8	5.8	8.7	6.5	8.2	19.8	17.1	9.4	14.1	15.5	13.3

Reserve Ratios for Primary Companies

Exhibit 3A

Primary Insurers	Asbestos					Environmental				
	3 yr avg.	@12/95	@12/94	@12/93	@12/92	3 yr avg.	@12/95	@12/94	@12/93	@12/92
A	1.00%	0.75%	1.06%	1.28%	1.29%	0.84%	0.49%	0.86%	1.52%	2.19%
B	3.78%	4.78%	3.04%	3.15%	3.68%	3.24%	5.21%	1.57%	1.38%	1.35%
C	1.71%	1.88%	2.30%	0.83%	1.10%	1.99%	2.30%	2.32%	0.97%	1.02%
D	5.44%	4.86%	6.08%	5.57%	3.63%	4.14%	2.95%	5.52%	4.83%	3.59%
E	0.55%	0.50%	0.61%	0.58%	0.36%	1.49%	1.31%	1.41%	1.94%	1.72%
F	1.94%	2.65%	1.54%	1.37%	1.22%	2.44%	3.35%	1.68%	1.58%	1.18%
G	22.68%	18.81%	23.47%	27.35%	26.19%	4.05%	3.37%	4.54%	4.78%	0.83%
H	0.62%	0.52%	0.68%	0.71%	0.61%	0.96%	0.99%	0.86%	1.03%	1.13%
I	0.60%	0.49%	0.67%	0.67%	0.57%	0.91%	0.93%	0.81%	0.97%	1.07%
J	5.29%	4.41%	4.73%	7.16%	8.48%	5.43%	4.67%	6.63%	5.44%	6.20%
K	1.90%	1.65%	2.05%	2.10%	2.50%	1.37%	0.96%	1.84%	1.59%	1.59%
L	0.81%	0.99%	0.79%	0.59%	0.51%	0.77%	0.75%	0.79%	0.78%	0.81%

Reserve Ratio = Net Ending Reserve / Net Industry Ending Reserve
3 year average Reserve ratio = Last 3 Year's Net Ending Reserves/Last 3 Year's Industry Net Ending Reserves

Exhibit 3B

Reserve Ratios for Reinsurers

Reinsurers	Asbestos					Environmental				
	3 yr avg.	@12/95	@12/94	@12/93	@12/92	3 yr avg.	@12/95	@12/94	@12/93	@12/92
A	3.87%	4.97%	3.62%	2.57%	2.04%	2.25%	3.90%	0.66%	0.90%	1.14%
B	2.75%	3.96%	1.87%	2.00%	2.10%	1.48%	2.06%	0.86%	1.07%	1.01%
C	3.81%	3.27%	4.04%	4.32%	3.25%	7.51%	6.26%	8.59%	8.67%	10.13%
D	0.62%	0.40%	0.71%	0.83%	0.92%	0.20%	0.23%	0.17%	0.16%	0.14%
E	0.08%	0.05%	0.12%	0.10%	0.17%	0.17%	0.11%	0.19%	0.24%	0.37%
F	1.68%	1.07%	1.90%	2.33%	1.79%	0.94%	0.80%	0.99%	1.16%	1.20%
G	0.04%	0.06%	0.03%	0.03%	0.03%	0.02%	0.01%	0.02%	0.02%	0.02%
H	0.07%	0.07%	0.07%	0.06%	0.05%	0.47%	0.48%	0.46%	0.47%	0.47%
I	0.56%	0.43%	0.66%	0.64%	0.77%	0.39%	0.32%	0.45%	0.48%	0.57%
J	0.21%	0.19%	0.23%	0.22%	0.26%	0.04%	0.03%	0.05%	0.05%	0.07%
K	0.26%	0.24%	0.26%	0.27%	0.27%	0.15%	0.15%	0.14%	0.15%	0.16%
L	0.17%	0.17%	0.16%	0.17%	0.18%	0.17%	0.14%	0.19%	0.19%	0.13%
M	0.02%	0.01%	0.03%	0.03%	0.09%	0.03%	0.03%	0.04%	0.04%	0.03%
N	0.12%	0.10%	0.14%	0.14%	0.12%	0.12%	0.10%	0.13%	0.15%	0.17%
O	0.21%	0.17%	0.19%	0.29%	0.27%	0.07%	0.06%	0.09%	0.09%	0.08%
P	0.31%	0.30%	0.31%	0.32%	0.37%	0.36%	0.35%	0.38%	0.33%	0.41%
Q	0.06%	0.06%	0.07%	0.06%	0.05%	0.03%	0.02%	0.04%	0.03%	0.04%

Reserve Ratio = Net Ending Reserve / Net Industry Ending Reserve
3 year average Reserve ratio = Last 3 Year's Net Ending Reserves/Last 3 Year's Industry Net Ending Reserves

Exhibit 4A

Premium Ratios for Primary Insurers

Primary Insurers	Net Written Premium ($000's) 1972	1973	1974	1975	1976
A	0.027	0.027	0.023	0.019	0.020
B	0.002	0.002	0.002	0.002	0.004
C	0.028	0.028	0.030	0.017	0.018
D	0.047	0.047	0.056	0.057	0.049
E	0.005	0.005	0.006	0.007	0.006
F	0.024	0.027	0.025	0.029	0.024
G	0.029	0.032	0.024	0.021	0.020
H	0.003	0.005	0.003	0.007	0.008
I	0.005	0.005	0.002	0.007	0.008
J	0.020	0.019	0.019	0.020	0.021
K	0.003	0.003	0.003	0.002	0.002
L	0.003	0.002	0.002	0.003	0.003
Percent of Total Industry*	0.203	0.212	0.205	0.203	0.197

* Commercial Multi Peril and General Liability Net Written Premium for Primary and Reinsurance companies

Exhibit 4B

Premium Ratios for Reinsurers

Reinsurers	Net Written Premium ($000's) 1972	1973	1974	1975	1976
A	0.002	0.002	0.002	0.002	0.002
B	0.004	0.004	0.004	0.005	0.006
C	0.016	0.015	0.014	0.013	0.014
D	0.004	0.004	0.004	0.004	0.005
E	0.000	0.000	0.000	0.000	0.001
F	0.000	0.010	0.012	0.018	0.021
G	0.000	0.000	0.000	0.000	0.000
H	0.000	0.000	0.000	0.001	0.001
I	0.000	0.000	0.001	0.002	0.002
J	0.000	0.000	0.000	0.000	0.000
K	0.002	0.002	0.002	0.002	0.002
L	0.000	0.000	0.000	0.000	0.000
M	0.000	0.000	0.000	0.000	0.000
N	0.000	0.002	0.002	0.002	0.001
O	0.000	0.000	0.000	0.000	0.000
P	0.000	0.000	0.001	0.001	0.001
Q	0.000	0.000	0.000	0.000	0.000
Percent of Total Industry*	0.028	0.038	0.042	0.050	0.056

* Commercial Multi Peril and General Liability Net Written Premium for Primary and Reinsurance companies

Exhibit 5A

Payment Ratios for Primary Companies

Primary Insurers	Asbestos					Environmental				
	3 yr avg.	@12/95	@12/94	@12/93	@12/92	3 yr avg.	@12/95	@12/94	@12/93	@12/92
A	1.94%	1.25%	2.36%	2.27%	2.78%	3.73%	4.41%	2.77%	3.82%	4.89%
B	4.02%	3.29%	3.77%	5.05%	5.40%	3.56%	2.98%	4.72%	3.07%	3.38%
C	1.32%	1.00%	1.09%	1.91%	1.89%	1.46%	1.59%	1.77%	0.91%	1.44%
D	5.26%	2.17%	6.00%	7.91%	6.67%	7.71%	8.82%	6.77%	7.09%	7.56%
E	0.05%	0.40%	-0.35%	0.06%	1.31%	1.24%	1.17%	1.48%	1.07%	0.58%
F	2.91%	3.47%	3.78%	1.44%	2.24%	3.34%	3.99%	2.66%	3.16%	4.48%
G	11.94%	9.53%	12.34%	14.16%	9.52%	4.83%	3.61%	6.31%	4.99%	3.25%
H	0.97%	0.83%	0.91%	1.18%	0.67%	1.68%	1.12%	1.54%	2.73%	1.67%
I	0.91%	0.83%	0.82%	1.09%	0.67%	1.59%	1.06%	1.46%	2.55%	1.56%
J	2.89%	1.54%	3.17%	4.08%	4.19%	4.82%	2.65%	5.81%	7.02%	6.99%
K	2.14%	2.03%	2.44%	1.95%	1.04%	2.54%	3.34%	1.82%	2.14%	3.15%
L	0.35%	0.33%	0.33%	0.40%	0.39%	0.45%	0.34%	0.39%	0.67%	0.59%

Payment Ratio = Net Annual Payment / Net Industry Annual Payment
3 year average payment ratio = Last 3 Year's Net Annual Payments/Last 3 Year's Industry Net Annual Payments

Exhibit 5B

Payment Ratios for Reinsurers

	Asbestos					Environmental				
Reinsurers	3 yr avg.	@12/95	@12/94	@12/93	@12/92	3 yr avg.	@12/95	@12/94	@12/93	@12/92
A	2.06%	2.03%	3.28%	0.87%	NA	0.49%	0.73%	0.35%	0.27%	NA
B	2.94%	3.46%	2.47%	2.84%	2.37%	1.45%	1.16%	1.83%	1.46%	1.53%
C	3.17%	4.44%	2.31%	2.64%	2.93%	4.50%	4.62%	5.42%	3.22%	2.76%
D	0.41%	0.31%	0.32%	0.59%	0.21%	0.31%	0.53%	0.04%	0.29%	0.37%
E	0.09%	0.19%	0.02%	0.05%	0.07%	0.13%	0.10%	0.16%	0.16%	0.08%
F	1.47%	0.05%	3.92%	0.58%	1.46%	0.39%	0.32%	0.64%	0.19%	0.45%
G	0.04%	0.07%	-0.01%	0.05%	0.02%	0.01%	0.02%	0.00%	0.01%	0.01%
H	-0.01%	-0.08%	0.01%	0.04%	0.03%	-0.23%	-0.83%	0.19%	0.21%	0.08%
I	0.56%	0.89%	0.46%	0.30%	0.57%	0.18%	0.11%	0.31%	0.12%	0.34%
J	0.06%	0.04%	0.10%	0.05%	0.06%	0.04%	0.01%	0.10%	0.02%	0.04%
K	0.27%	0.40%	0.27%	0.14%	0.19%	0.07%	0.08%	0.10%	0.02%	0.05%
L	0.19%	0.00%	0.31%	0.29%	0.26%	0.03%	0.00%	-0.02%	0.15%	0.14%
M	0.03%	0.04%	0.01%	0.06%	0.00%	0.00%	0.00%	0.01%	-0.00%	0.02%
N	0.19%	0.27%	0.22%	0.07%	0.24%	0.06%	0.09%	0.07%	0.01%	0.01%
O	0.24%	0.09%	0.48%	0.17%	0.23%	0.12%	0.12%	0.11%	0.13%	0.11%
P	0.01%	0.03%	0.02%	-0.02%	0.25%	0.05%	0.02%	0.06%	0.08%	0.06%
Q	0.03%	0.02%	0.04%	0.02%	0.05%	0.02%	0.03%	0.02%	0.00%	0.00%

Payment Ratio = Net Annual Payment / Net Industry Annual Payment
3 year average payment ratio = Last 3 Year's Net Annual Payments/Last 3 Year's Industry Net Annual Payments

Exhibit 6

Total NPL Cost Distribution by Year

Year	% of Total NPL Costs
1945	1.287%
1946	0.939%
1947	1.083%
1948	1.089%
1949	1.042%
1950	0.980%
1951	1.031%
1952	1.724%
1953	1.721%
1954	1.734%
1955	1.936%
1956	2.088%
1957	2.169%
1958	2.271%
1959	2.305%
1960	2.416%
1961	2.468%
1962	2.730%
1963	2.808%
1964	2.851%
1965	3.051%
1966	3.048%
1967	3.138%
1968	3.308%
1969	3.359%
1970	3.547%
1971	3.756%
1972	3.863%
1973	3.671%
1974	3.820%
1975	3.764%
1976	3.769%
1977	3.608%
1978	3.701%
1979	3.338%
1980	2.750%
1981	2.297%
1982	1.786%
1983	1.518%
1984	1.207%
1985	1.029%
Total	100.000%