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A Report to the Minnesota Legislature

# ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE AND THE INSURABILITY OF MINNESOTA RISKS UNDER THE MINNESOTA ENVIRONMENTAL RESPONSE AND LIABILITY ACT

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Minnesota Department of Commerce
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# INTRODUCTION

On April 10, 1983, the Minnesota Environmental Response and Liability Act (MERLA) was signed into law. Hotly debated prior to its adoption, MERLA is now a central issue in the ongoing debate over Minnesota's business climate. This report examines MERLA's effect on the pollution liability insurance market in Minnesota.

MERLA addresses two basic problems: cleaning up dangerous hazardous waste sites in Minnesota and compensating the victims of accidents involving or associated with hazardous wastes. To facilitate clean-up, MERLA establishes the strict, joint and several liability of certain persons for clean-up costs. It also authorizes the Minnesota Pollution Control Agency to initiate clean-up action where and when necessary to protect the public health and to recover the costs of those actions from responsible persons. MERLA also ensures the availability of funds to finance clean-up by establishing the environmental response, compensation and compliance fund, also known as the Minnesota Superfund.

With respect to compensating victims, MERLA codifies rules of liability that specify how, when, and the extent to which accident victims are to be compensated for their losses by others somehow associated with those accidents. The act establishes the strict, limited joint and several liability of responsible persons for specific damages caused by the release of hazardous wastes into the environment. The act also makes liability retroactive to include situations where a harmful substance was disposed of as far back as January 1, 1973, and, in some cases, as far back as January 1, 1960; however, the liability provisions do not apply if the release of a substance into the environment occurred wholly before July 1, 1983. MERLA also codifies the circumstances where legal questions of causation (that is, whether the defendant's actions caused the plaintiff's injuries) may be decided by a jury.

MERLA's clean-up provisions were largely noncontroversial during the legislative debate preceeding adoption of the act, and have not been seriously questioned since then. In contrast, the act's

liability provisions were strongly opposed prior to adoption and are even more strongly opposed now. Criticism comes primarily from two sectors of the business community: those firms directly affected by the liability provisions due to their production of or association with hazardous wastes and the insurance industry. Those firms directly affected by the liability provisions argue that MERLA unfairly imposes liability on them and makes insurance against pollution-related liabilities unavailable. Certain members and representatives of the insurance industry argue that the act's liability provisions produce so much uncertainty and risk as to be uninsurable.

This report, as directed by the Minnesota Legislature, examines the pollution liability insurance market in Minnesota and MERLA's effect on the market. The first section of the report provides a brief overview of the pollution liability insurance business--how it is conducted and its major attributes. In the second section, current developments and trends in the market are discussed, including the responses of individual pollution liability insurers to the adoption of MERLA. The third section takes a closer look at the act's liability provisions and how they affect the insurability of Minnesota businesses. The report's conclusions are summarized in the final section of the report.

# ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE

Pollution liability insurance is unlike any other type of commercial liability insurance. This section reviews major aspects of the pollution liability insurance business, including common policy contract provisions, the insurance transaction, underwriting and pricing practices, and the role of reinsurance.

## BEGINNINGS

In the early 1970's, comprehensive general liability (CGL) insurance policies were amended to exclude from coverage liabilities resulting from the nonsudden release of hazardous substances to the environment. (An example of a nonsudden release is a slow leak from a toxic waste disposal site.) Insurers took this action for two reasons. First, nonsudden releases and the potential liabilities associated with those releases, had not been contemplated in the original underwriting design and pricing of CGL insurance coverage. Second, CGL policies were viewed as inappropriate vehicles for insuring nonsudden risks, due primarily to the long latency period and the extraordinarily catastrophic losses associated with those risks.

Coverage for sudden releases (for example, a massive pipeline break) continued to be provided under most CGL policies after the exclusion of nonsudden coverage; however, insurance for nonsudden occurrences was largely unavailable until 1980 when a handful of insurers began marketing products exclusively designed to provide nonsudden coverage. These products are commonly termed environmental impairment liability (EIL) insurance.

## EIL POLICY PROVISIONS

EIL policies differ in ways that may be of great importance to an individual insured. The purpose here is to describe the basic provisions found in most EIL policy contracts and to point out the important areas where policies often differ. Several EIL policy contracts currently in use were examined for this purpose.

## Insuring agreement

Nearly all EIL policies provide that the insurer will pay on behalf of the insured amounts to which the insured is legally obligated to pay to a third party for bodily injury or property damage caused by the nonsudden and accidental release of a hazardous substance to the environment. Only one EIL policy examined provides for the indemnification of insureds for losses incurred and paid to third parties, rather than the direct compensation of claimants.

## Claims-made basis

Most forms of liability insurance provide coverage on an occurrence basis, which means that any occurrence that takes place during the time when a policy is in force is covered under that policy, presuming that it meets all other terms and conditions of coverage. When a claim is reported does not affect coverage. In contrast, all EIL policies provide coverage on a claims-made basis, which means that the policy provides coverage against any claim initially reported during the stated policy or reporting period. EIL policies are written on a claims-made basis for two reasons. First, pollution related injuries often involve long latency periods--the time between release of, or exposure to, the substance causing injury and manifestation of injury. Where there has been a long latency period, there is also a greater potential for dispute regarding when the exposure causing injury occurred and who the insurer was at the time of exposure. Resolution of the dispute could determine whether or not a particular insurer pays the claim. Insurers can avoid, to a great extent, the costs and uncertainty associated with such disputes by issuing policies on a claims-made basis.

A second reason for writing EIL insurance on a claims-made basis is to mitigate the problems in pricing EIL coverage. Due to the long latency of many pollution related injuries, years or decades may pass before all claims associated with events occurring in a single calendar or accident year are reported. Because EIL insurance is a relatively new product, estimating

ultimate losses for any single year is difficult and highly speculative. With a claims-made format, recent claims experience is more useful in pricing current coverage because all injuries and claims are known soon after the close of the policy or reporting period.

Named-site coverage

Whereas many commercial liability insurance policies cover all of an insured's locations and operations, EIL policies typically specify the locations and sites to be insured. Using a named-site approach, insurers can select out less desirable exposures without losing an insured's account entirely. The same result can be obtained by excluding specified sites with a policy endorsement.

Limits of liability

EIL insurance policies specify the maximum amount that the insurer will pay on claims reported during the policy period. Policy limits are stated in two ways: as a maximum payable on any one covered claim and as a maximum payable on all covered claims. Insurers and insureds generally negotiate EIL policy limits, which vary from one policy to the next; however, insurers typically establish maximum policy limits in order to control their loss exposure and the exposure of their reinsurers. Currently, maximum limits range from as low as $5 million per occurrence/$5 million annual aggregate to as high as $20 million per occurrence/$20 million annual aggregate.

Clean-up

An important area of difference among EIL policies, and a subject of considerable dissatisfaction among EIL insureds and potential insureds, concerns coverage for the costs of cleaning up a contaminated site. Coverage for clean-up costs is provided by some EIL policies if the clean-up site is separate from the insured's premises and if clean-up is necessary to prevent personal injury or property damage to third persons. Policies providing coverage for off-site clean-up generally require that the insurer consent to clean-up

prior to it being undertaken. Most EIL policies do not provide coverage for costs incurred as a result of on-site clean-up actions. Of those that do, the amount payable for clean-up is limited to some fraction of the total policy limit.

Legal costs

A liability insurer has a duty to defend any legal actions against an insured if the insurer must pay any resulting damages or awards under the terms of the applicable insurance policy. Legal costs are typically incurred by an insurer above and beyond any policy limits, which apply only to legally imposed damages or awards. In contrast, several EIL policies contain provisions including legal defense costs in the limits of liability. As a result, a substantial portion of a policy's limit might go toward paying defense costs rather than compensating claimants.

Reporting periods

Most EIL policies allow for an extended period, beyond the close of the stated policy period, during which reported claims will be covered by the policy. This option is generally provided only where the insurer decides not to renew the policy. The allowable reporting or discovery period, and the additional cost to the insured, vary among EIL insurers. Six months is the most common reporting period available.

Retroactive dates

Some EIL policies provide for or specify a retroactive date, subsequent to which an event giving rise to a claim must have occurred if the claim is to be covered by the policy. For example, a claims-made policy with a retroactive date of January 1, 1960, would not cover a claim arising from actions by the insured occurring prior to that date. Claims-made policies without retroactive dates place no restrictions on when actions giving rise to a claim must have occurred. Retroactive dates often extend back to the insured's date of incorporation.

Exclusions

An EIL policy, like any other insurance policy, denies coverage under certain circumstances. Coverage exclusions are typically used to accomplish this task and may be included as standard contract language provisions or may be added as endorsements to the standard policy form. Coverage exclusions applicable only to individual insureds or groups of insureds are usually effected by endorsement, and are too many and varied to discuss here. The following coverage exclusions are standard contract provisions in one or more EIL policies currently in use.

**Expected or intended damages.** Most EIL policies exclude from coverage damages that were expected or intended by the insured. Similarly, damages that are a result of a willful violation of the law by the insured are excluded from coverage.

**Liability of others.** Most EIL policies exclude from coverage liabilities of others assumed by the insured by contractual agreement. This exclusion applies to liabilities assumed through indemnification agreements often issued by transporters and disposers of hazardous wastes to their customers; however, it does not apply if the liability would be the insured's even in the absence of the agreement.

**Closed sites.** Some EIL policies exclude from coverage liabilities associated with releases from closed or abandoned waste disposal, storage, or treatment sites, provided the release takes place after closure or abandonment of the site.

**Fines, penalties, and punitive damages.** Most EIL policies specifically exclude from coverage fines and penalties levied by governmental agencies against the insured. Several policies also exclude from coverage punitive damages awarded by a court against the insured.

**Sudden occurrences.** As explained earlier, CGL insurance policies exclude from coverage liabilities associated with nonsudden occurrences. Conversely,

most EIL policies exclude from coverage liabilities resulting from sudden occurrences. One EIL policy in use provides standard coverage for sudden, as well as nonsudden, occurrences. Most EIL insurers do allow insureds to "buy back" sudden coverage for an additional premium.

**Products, completed operations.** Several EIL policies exclude from coverage liability for damages stemming from goods produced and sold by the insured and services performed to completion by the insured for other parties. The purpose of this exclusion is to avoid duplicating coverages provided under other types of liability insurance policies.

**Employees, workers' compensation.** All EIL policies exclude from coverage liabilities resulting from injuries incurred by employees of the insured during the course of employment and liabilities imposed by state workers' compensation laws.

**Nuclear risks.** Most policies exclude from coverage liabilities resulting from nuclear reactions or the handling of radioactive materials.

**Acid rain.** Some EIL policies exclude from coverage liabilities associated with acid rain.

**Motor vehicles, watercraft, aircraft, airports.** Liabilities resulting from the ownership or operation of any of these are excluded from coverage under some policies.

The coverage exclusions described above are standard provisions in one or more EIL insurance policies currently in use. Nonstandard exclusions, which may exclude from coverage specific named sites, geographical territories, certain perils, or any other specified loss exposure, may be added by endorsement. Such exclusions are generally negotiated by insurer and insured.

In summary, EIL insurance policies are unlike any other third-party liability insurance contract. Coverage is provided on a claims-made basis for a narrow range of

perils. Possibly significant exclusions may affect the suitability of a particular policy to a particular insured.

## THE INSURANCE TRANSACTION

A business considering the purchase of EIL insurance must consult with an insurance broker or agent for coverage and premium cost information; however, due to the relatively small volume of EIL insurance sold in this country, few agents are familiar with EIL markets. A potential buyer may find its usual agent or broker unable to provide needed information.

Binding (putting into force) EIL coverage is a difficult and expensive process. An experienced broker or agent who has been contacted by a potential EIL insurance buyer will first discuss with the buyer, or the buyer's agent, the terms and conditions of available coverage. An application form will be completed and submitted to a selected insurer, or its managing general agent, for review. After reviewing the application, the insurer may decline to insure the risk or may quote a tentative premium and require that a risk assessment be performed. At this stage in the application process, coverage is not yet bound.

The risk assessment report is often the most important source of information for insurers reviewing applications for EIL insurance coverage. An insurer will rarely agree to bind coverage without first examining and considering a risk assessment report and, in some cases, will only consider reports prepared by assessment firms it has approved. A buyer is usually responsible for contracting with an independent risk assessment firm to conduct the study. Risk assessments typically cost $5,000 or more, which is the responsibility of the buyer. The report is the property of the buyer who decides whether to forward it to the insurer, thereby continuing the insurance application process, or withhold it, which it might do for any number of reasons.

To an insurer considering an application for pollution liability insurance coverage, the risk assessment

report is especially valuable in identifying hazardous conditions and evaluating the loss potential of individual risks. The risk assessment usually includes an on-site inspection of all or selected company locations. The general objectives of a risk assessment are to identify the following: pathways by which hazardous substances may travel off site, surrounding populations that could be affected by the release of hazardous substances, operations and practices that would affect the likelihood of a release, and hazardous substances involved and their possibly harmful effects on the environment. Along with geographical, demographic, biological, and other environmental factors, a risk assessment will also examine corporate management attitudes and practices regarding environmental concerns, compliance with regulatory requirements, and the company's history with respect to personal injury lawsuits and liability insurance claims.

After an insurer has reviewed the risk assessment report, it will provide a final premium quotation and, if the buyer agrees to the insurer's stated terms and conditions, bind coverage.

## EIL UNDERWRITING AND PRICING

An insurance company is selective in the risks it will insure. The process of classifying risks according to their insurability and rejecting those risks considered uninsurable or inconsistent with the company's operating objectives is known as underwriting. In most lines of insurance, underwriting is governed by preprepared guides or manuals that specify the characteristics of a risk to be considered in making an underwriting decision and classify risks according to those underwriting criteria. Minimum standards may indicate when a risk is to be rejected.

The objectives of underwriting are the same with EIL insurance as with any other line of insurance; however, EIL underwriting methods and procedures are substantially less standardized than the methods and procedures used in most other lines of insurance. Due primarily to the lack of historical claims experience, the relatively small number of EIL exposures, and the

complexity and heterogeneity of those exposures, risks are difficult, if not impossible, to classify in a manner that reflects true differences in the probability or potential severity of loss.

To compensate for the lack of standard decision rules and to minimize uncertainty, underwriting personnel consider any relevant information when evaluating an EIL submission. Extensive data describing potential insureds are collected and analyzed. The initial application form and the environmental risk assessment report are the primary sources of information considered by underwriters. Other sources of information include annual reports, 10K reports filed with the Securities and Exchange Commission, news reports, and pertinent legal records. An underwriter may also consider the legal environment and related state and local laws affecting the potential liability of a particular EIL applicant. In short, an underwriter will consider any available information possibly relevant to the applicant's loss potential before binding coverage.

The abundance of scientific, engineering, financial, managerial, and legal data considered with each EIL underwriting decision masks the subjective elements of the underwriting decision process. The final assessment of the insurability of any risk is based, in large part, on how the underwriter involved weighs the various factors being considered, a process which necessarily reflects the underwriter's unique prior experience and personal opinion regarding the importance of each factor. This subjective aspect of the EIL underwriting process is unlikely to change until the claims experience needed to statistically relate the characteristics of loss exposures to actual losses becomes available.

Little information could be obtained during the course of this study describing the pricing of EIL insurance. Only two of several insurers contacted provided any detailed information describing their pricing practices.

EIL coverage is priced using judgment rating methods--preexisting premium rate schedules and rate classes are not used. Each exposure or potential insured is individually and independently rated. Beginning with a base or minimum premium, an underwriter typically will adjust that base to reflect the size of the insured and the amount of insurance (limits) being purchased. Other adjustments may be made to reflect the underwriter's assessment of factors supposedly related to loss potential, such as management attitudes and the toxicity of substances handled or produced. Final adjustments may reflect an overall assessment of the risk and existing market conditions. According to one insurer representative, competition is of primary importance when pricing EIL coverage.

## ROLE OF REINSURANCE

Reinsurance is a method or means by which one insurer (the reinsurer) insures another insurer (the reinsured) for a portion of the losses the reinsured incurs under policies of insurance it has issued to the public. Through a reinsurance treaty (contract), a reinsurer typically agrees to indemnify an insurer for some portion of the insurer's claim losses in exchange for a reinsurance premium, which may be some specified portion of the original premium collected by the insurer. Reinsurance may be purchased for several reasons. It may serve to increase the amount of insurance an insurer can issue to the public--thereby enhancing the insurer's "capacity." Reinsurance may also enhance an insurer's financial strength by reducing certain balance sheet liabilities while increasing certain assets, and help stabilize an insurer's underwriting results.

EIL insurance is heavily reinsured. Reinsurance of EIL business can be arranged using a number of techniques and methods. One technique used is a quota share reinsurance treaty, under which the EIL insurer cedes (pays) to the reinsurer a percentage of its EIL premium and the reinsurer agrees to pay the same percentage of any EIL claim losses incurred by the insurer. The reinsurer may return a portion of the ceded premium back to the insurer as a "commission." Although a

single reinsurer may be involved, it is more likely that several reinsurers will participate in the same treaty. Each may assume as little as 1/4 or 1/2 of one percent of an insurer's total EIL premium and loss exposure. Fifty or more reinsurers may participate in a single treaty, and 75 percent or more of an insurer's EIL premium may be ceded through the treaty. A lead reinsurer will assume the largest portion of the ceded premium and loss exposure. The lead reinsurer typically has some expertise in the EIL field and is necessary to attract other participating reinsurers. The lead reinsurer also actively participates in the development of the reinsurance treaty.

The reinsurance treaty determines, in part, the conditions and terms of coverage offered by an EIL insurer. Treaties include terms and conditions, including coverage exclusions, that are much like the terms and conditions found in the insurance policies being reinsured. For example, a reinsurance treaty may exclude from coverage risks located at a specified geographical location or risks of a certain industrial type. If a reinsurance treaty excludes coverage in ways that a reinsured primary policy does not, then the insurer must either amend the terms of the primary EIL policy to be consistent with the reinsurance treaty, or accept the fact that some of its EIL exposure may not be reinsured. With the catastrophic potential associated with EIL coverage, an insurer is unlikely to knowingly insure EIL exposures that are not reinsured.

In summary, reinsurance is a critically important element of EIL insurance. EIL insurance would be unavailable if substantial reinsurance protection were unavailable. Similarly, reinsurers play an important role in determining the terms and conditions of EIL insurance coverage provided to the public.

# DEVELOPMENTS AND TRENDS IN THE EIL INSURANCE MARKET

This section describes the EIL insurance market countrywide and in Minnesota. First described are major insurer participants and the magnitude of the market. EIL claims experience is also reviewed, followed by buyer demand for EIL insurance, current market trends, and uncertainties in the future development of the market.

## ACTIVE EIL INSURANCE PROGRAMS

Eight active EIL insurance programs (programs with policies in force and that are accepting applications for EIL insurance coverage) were identified during the course of this study. These programs are listed in Exhibit 1.

EXHIBIT 1

Active Environmental Impairment
Liability Insurance Programs

1. Shand, Morahan and Company, Inc.
   (Evanston Insurance Company)
2. American International Group
3. Stewart Smith Mid America, Inc.
   (Great American Surplus Lines Insurance Company)
4. Travelers Insurance Company
5. Pollution Liability Insurance Association
6. Swett & Crawford Management Company
   (St. Paul Surplus Lines Insurance Company)
7. Hartford Insurance Company
8. Home Insurance Company

Three of the EIL insurance programs in Exhibit 1 (Shand, Morahan; Stewart Smith; and Swett and Crawford) are managing general agents rather than insurance companies. A managing general agent (MGA) contracts with an insurance company (shown in parenthesis) to provide complete underwriting services in a specified line of insurance for that insurer. Where utilized, the MGA is responsible for reviewing, and accepting or

rejecting, all applications for insurance coverage. An MGA works closely with the underwriting insurance company in developing an insurance program and negotiating reinsurance arrangements. MGAs are frequently used in areas of insurance requiring considerable underwriting skill and expertise.

The EIL insurers contracting with MGAs operate in Minnesota as eligible surplus lines insurers, while all other EIL insurers operate in Minnesota as licensed companies. Licensed insurers and surplus lines insurers are often described, respectively, as being admitted and not admitted to a particular state. Admitted and nonadmitted insurers operate under different sets of regulatory requirements. Nonadmitted insurers can only sell insurance that is difficult or impossible to buy from admitted insurers. In addition, the payment of claims by a nonadmitted insurer is not guaranteed under the Minnesota Insurance Guaranty Association Act, while the payment of claims by an admitted insurer is guaranteed under the Guaranty Act.

A unique member of the EIL insurance market is the Pollution Liability Insurance Association (PLIA). PLIA fully reinsures the pollution liability risks of each of its members. At the time of writing, the association included 49 insurer members, each of which agrees to assume a certain percentage of all participating companies' pollution liability risks based on the relative commitment of each to PLIA's total capacity. For less hazardous risks, PLIA members are granted complete underwriting authority. For moderate and high-risk pollution liability exposures, the association exercises independent underwriting control.

PLIA is unique among EIL insurers in another respect: all other EIL insurers issue pollution liability coverage on EIL policy forms, which exclude from coverage liabilities resulting from sudden occurrences. In contrast, PLIA uses the pollution liability policy form developed by the Insurance Services Office, which combines coverage for sudden and nonsudden occurrences.

The EIL insurance market is a relatively new market. Of the eight programs in Exhibit 1, only two have been

active four or more years; two have been active three years; and the remaining four have been active two years or less.

## EIL PREMIUM VOLUME, POLICIES ISSUED

Active EIL insurers, and four other insurers no longer active in the market anywhere in the United States, were surveyed to obtain EIL premium and policy information. This information was sought for the market countrywide as well as for Minnesota only. Of the twelve insurers surveyed, 11 provided countrywide information. All twelve companies provided the information for Minnesota only. Insurers were asked to provide the total number of EIL policies issued or renewed countrywide during each of the years 1981-1983, and earned EIL premium for those policies. Insurers were also asked to provide the number of policies insuring Minnesota risks and the premium associated with those policies. Due to the proprietary nature of the information obtained, and because the unique experience of individual EIL insurers is not essential information to report, only aggregate figures are presented. Exhibit 2 summarizes the information obtained.

**EXHIBIT 2**

**EIL Insurance Countrywide and in Minnesota 1981 - 1983**

| | Year | | |
|---|---|---|---|
| | 1981 | 1982 | 1983 |
| Number of EIL policies issued/renewed countrywide[a] | 197 | 657 | 1,547 |
| Total EIL premium countrywide[a,c] | $ 4,002,287 | $14,559,724 | $30,785,760 |
| Number of EIL policies insuring Minnesota risks[b] | d | 3 | 27 |
| Total EIL premium in Minnesota[b,c] | $ 5,397 | $ 81,355 | $ 371,004 |

[a] Eleven insurers reporting.
[b] Twelve insurers reporting.
[c] Total premium earned. One insurer provided written premium.
[d] Not available.

For 1983, the latest year for which information is available, EIL premium countrywide for the 11 insurers responding totaled $30.8 million with 1,547 policies issued or renewed. Sixty-two percent of this business was conducted by only two insurers. (To add perspective to these numbers, workers' compensation premium in Minnesota alone exceeded $350 million in 1983 with over 250 participating insurers, and worldwide satellite insurance premiums averaged approximately $65 million annually for the years 1979-1983.) The twelve insurers surveyed reported that 27 EIL policies issued or renewed in 1983 insured Minnesota risks. Total premium on those policies equalled $371,004. EIL premium costs averaged $19,900 countrywide and $13,741 for Minnesota insureds during 1983.

## EIL CLAIMS EXPERIENCE

Eleven of twelve insurers surveyed reported that 304 EIL claims were reported to them countrywide during the years 1981-1983. As Exhibit 3 indicates, total losses for claims reported in 1983 were estimated at $5,387,342. For 1983, the average claim loss was $29,927. (Loss estimates for some of the claims reported for 1983 have not yet been made; therefore, the 1983 claim loss total may eventually exceed the amount shown in Exhibit 3.)

EXHIBIT 3

EIL Claims Experience Countrywide and in Minnesota
1981 - 1983

| | Year | | |
|---|---|---|---|
| | 1981 | 1982 | 1983 |
| Number of EIL claims reported countrywide[a] | 20 | 104 | 180 |
| Total EIL losses countrywide[a,c] | $2,868,135 | $ 931,778 | $5,387,342 |
| Number of Minnesota EIL claims reported[b] | 0 | 0 | 8 |
| Total losses on Minnesota EIL claims[b,c] | $ 0 | $ 0 | $ 111,000 |

[a] Eleven insurers reporting.
[b] Twelve insurers reporting.
[c] Case basis.

Of the twelve insurers surveyed, only one reported any Minnesota claims for the period 1981-1983. That insurer had eight such claims--all during 1983. According to a representative of that insurer, only one of the eight claims reported is expected to result in an actual loss--now estimated at $111,000.

## BUYER DEMAND FOR EIL INSURANCE

Numerous trade-press reports have described the disappointment and surprise of insurers in response to the slow development of the EIL insurance market. Some reports do suggest a recent increase in buyer demand; however, the EIL market remains embryonic and is likely to remain so until a significant and consistent demand for EIL insurance coverage develops.

To better understand buyer demand for EIL insurance in Minnesota, known hazardous waste generators in the state were surveyed. The sample of generators surveyed was drawn from businesses participating in the hazardous waste regulatory program administered by the Minnesota Pollution Control Agency. Every business known to produce hazardous wastes in Minnesota is required to participate in this program. Among other things, a participating business must file a plan describing the nature and volume of hazardous wastes produced in Minnesota and the methods used in disposing of the wastes.

EIL insurance questionnaires were distributed to 496 hazardous waste generators in the state, representing almost 50 percent of those generators producing more than a de minimis amount (265 gallons or more) of hazardous waste annually. The first group included those generators that produce more than 13,250 gallons of hazardous wastes annually. Questionnaires were mailed to all 159 (100 percent) of the generators falling within that group. The second group of generators included those that produce from 2,651 to 13,250 gallons of hazardous waste every year. Questionnaires were mailed to 140 (50 percent) of the generators, selected randomly, falling within that group. The third group of generators included those that produce from 265 to 2,650 gallons of hazardous waste every

year. Questionnaires were mailed to 197 (33 percent) of those generators, also selected randomly. The response rate on each group of surveyed generators was quite good, with 59 percent of all questionnaires returned.

The primary objectives of the generator survey were to determine the extent to which hazardous waste generators, primary buyers of EIL insurance, are insured for nonsudden releases and to determine the reason why some generators are not insured. To address the first concern, generators were asked to indicate whether or not they were insured against liabilities resulting from the nonsudden release of hazardous substances to the environment. Exhibit 4 summarizes the responses to this question. Nearly three-quarters of all respondents indicated that they were not insured for nonsudden releases, while another 14 percent said that they did not know if they were insured. Only 14 percent of all surveyed generators indicated that they were insured for nonsudden releases.

There were few differences in response by the three different generator groups. A slightly greater proportion of the large-volume generators indicated that they were insured for nonsudden coverage, and knew whether or not they were insured.

EXHIBIT 4

Proportion of Minnesota Hazardous Waste Generators Insured for Nonsudden Releases

| Insured for nonsudden release? | Generator Groups: Large Volume | Medium Volume | Small Volume | All Surveyed Generators |
|---|---|---|---|---|
| Yes | 17 (20%) | 7 (9%) | 12 (12%) | 36 (14%) |
| No | 63 (73%) | 53 (72%) | 72 (71%) | 188 (72%) |
| Don't know | 6 (7%) | 14 (19%) | 17 (17%) | 37 (14%) |
| Generator group totals | 86 (100%) | 74 (100%) | 101 (100%) | 261 (100%) |

A closer look at those generators claiming to be insured for nonsudden releases suggests that the true proportion insured is probably less than the 14 percent indicated. Respondents were also asked to identify the type of insurance policy providing coverage for nonsudden releases. Twenty-six (72 percent) of those claiming to have coverage, indicated that it was provided under some type of policy other than an EIL policy. In this case, CGL insurance was most often indicated. Although some courts have found the nonsudden exclusion in CGL policies to be invalid (see discussion below), it would be speculative at this time to assume that coverage exists. A more likely explanation for the number of respondents claiming coverage under non-EIL policies is that many insureds simply do not understand the distinction between sudden and nonsudden releases and its relationship to CGL and EIL insurance policies.

A hazardous waste generator's uninsured status may result from several conditions. The hazardous waste generator survey attempted to identify the relative importance of various factors in explaining the extent to which businesses go uninsured. From a list of nine possible reasons for not being insured for nonsudden releases, respondents were asked to pick the single most important. Exhibit 5 summarizes the responses to this question.

The most frequently indicated reason why uninsured hazardous waste generators in Minnesota were uninsured is the belief that insurance for liabilities resulting from the nonsudden release of hazardous substances is not needed. Forty-eight percent of all respondents selected this as the principal reason for not being insured. Small-volume uninsured generators were much more likely to choose this as the principal reason for being uninsured (66 percent), than were medium-volume generators (49 percent) and large-volume generators (28 percent).

The second most frequently indicated reason why uninsured hazardous waste generators in Minnesota are uninsured is the belief that insurance is too expensive. Twelve percent of all respondents selected this

EXHIBIT 5

Minnesota Hazardous Waste Generators
Primary Reason Why Uninsured for Nonsudden Occurrences

| Primary reason given | Generator Groups: Large Volume | Medium Volume | Small Volume | All Generators |
|---|---|---|---|---|
| Thought that they were insured | 0 (0%) | 0 (0%) | 2 (3%) | 2 (1%) |
| Insurance is not needed | 17 (28%) | 25 (49%) | 43 (66%) | 85 (48%) |
| Insurance is too expensive | 10 (17%) | 6 (12%) | 5 (8%) | 21 (12%) |
| Available coverage is inadequate | 5 (8%) | 3 (6%) | 0 (0%) | 8 (5%) |
| Cannot find an EIL insurer | 3 (5%) | 4 (8%) | 2 (3%) | 9 (5%) |
| Insurance cancelled/ not renewed | 1 (2%) | 0 (0%) | 0 (0%) | 1 (1%) |
| No insurer will insure | 1 (2%) | 1 (2%) | 2 (3%) | 4 (2%) |
| Chose to self-insure | 8 (13%) | 4 (8%) | 6 (9%) | 18 (10%) |
| Various other reasons | 15 (25%) | 8 (16%) | 5 (8%) | 28 (16%) |
| Generator group totals | 60 (100%) | 51 (100%) | 65 (100%) | 176 (100%) |

as the principal reason why they were uninsured. Large-volume generators were more likely to select cost as the primary reason why they were uninsured (17 percent), than were medium-volume generators (12 percent) and small-volume generators (8 percent).

A small proportion of generators related problems in obtaining coverage as the primary reason for being uninsured. Two percent of all respondents indicated that the primary reason why they were uninsured was because no insurer would insure them. Five percent of all respondents indicated that the primary reason why they were uninsured was because they could not find an

insurer that sells EIL or pollution liability insurance. One respondent indicated that it had been insured, but that their insurance had been cancelled or not renewed.

Ten percent of all respondents indicated that the reason why they were uninsured was that they had chosen, instead, to self-insure. Large-volume generators were more likely to choose self-insurance (13 percent), than medium-volume generators (8 percent) or small-volume generators (9 percent).

## RECENT TRENDS AND DEVELOPMENTS

The following recent developments indicate constriction in the EIL insurance market nationwide: the recent withdrawal from the market of two EIL insurance programs, reductions in the maximum liability limits of several insurers, and significant increases in EIL premium costs. In Minnesota, adoption of the Minnesota Environmental Response and Liability Act has resulted in even greater market constriction.

Between 1980 and 1983, the number of active EIL insurance programs nationwide increased from three to ten, indicating a developing insurance market. In 1984, however, this trend was reversed when two active programs, involving four insurance companies, withdrew from the market nationwide. Similarly, no new EIL insurance program was started in 1984--the first year during the existence of the market that no new EIL program was introduced.

A second important development in the EIL insurance market nationwide is a reduction in the maximum liability limits insurers are willing to issue with individual EIL insurance policies. As explained earlier, EIL insurance policies limit the amount payable on one claim and the aggregate amount payable on all claims incurred during the effective policy period. Exhibit 6 shows the maximum limits EIL insurers were willing to issue between 1980 and 1984. Three of the eight currently active EIL insurers reduced their maximum liability limits between July, 1983, and July, 1984. One insurer increased its maximum annual aggre-

EXHIBIT 6

Maximum EIL Liability Limits--1980-1984a
($ in millions, per occurrence/annual aggregate)

| | Yearb | | | | |
|---|---|---|---|---|---|
| EIL Insurance Program | 1980 | 1981 | 1982 | 1983 | 1984 |
| ERAS, Internationalc | $10/$20 | $30/$60 | $30/$60d | $20/$40 | -- |
| Shand, Morahan & Company, Inc. | $25/$50 | $25/$50 | $30/$60 | $30/$60 | $20/$20 |
| American International Group | $30/$30 | $30/$30 | $20/$20 | $20/$20 | $20/$20 |
| Stewart Smith Mid America, Inc. | -- | $10/$20 | $10/$20 | $15/$30 | $15/$30 |
| Swett & Crawford Management Company | -- | $10/$10 | $20/$20 | $15/$15 | $5/$5 |
| Travelers Insurance Company | -- | -- | $10/$10 | $10/$10 | $10/$10 |
| Pollution Liability Insurance Association | -- | -- | $6/$6 | $6/$6 | $6/$10 |
| Hartford Insurance Company | -- | -- | $10/$10 | $10/$10 | $9.5/$9.5 |
| Dryden & Company, Inc.c | -- | -- | $5/$10 | $5/$10 | -- |
| Home Insurance Company | -- | -- | -- | $10/$20 | $10/$20 |

a Partial source: "The Potential Impact of CERCLA Reauthorization Amendments Developed by the Senate Environment and Public Works Committee Staff on Environmental Impairment Liability Insurance," prepared for The Chemical Manufacturers Association by Risk Science International, Washington, D.C., July 17, 1984.
b As of July of indicated year.
c Currently inactive.
d One member of the ERAS program, Hartford Steam Boiler Inspection and Insurance Company, had limits of $20/$40 at that time.

gate limit during the same period. Not all EIL policies are issued with liability limits equal to the insurer's maximum; however, a reduction in available limits is important to companies that need high coverage limits due to the extent of their exposure or because they have large assets to protect.

EIL premium costs increased nationwide, in some cases dramatically, during 1984. This followed stable or falling premium costs during the market's initial

years. Several EIL insurer representatives contacted during the course of this study reported widespread, if not uniform, EIL premium cost increases. One representative reported minimum across-the-board increases of 35 percent. Trade press reports also have indicated substantial EIL premium cost increases during 1984.

The developments described above--fewer EIL insurers, reduced liability limits, and higher premium costs--are the consequences of numerous prior developments and conditions. The following are of particular importance: poor underwriting results throughout the reinsurance industry, the increasingly negative attitude of reinsurers toward insuring third-party liability risks, and EIL claim losses.

Recent underwriting results in the reinsurance industry have been extremely poor. Exhibit 7 summarizes the recent underwriting experience, in all lines, of a large sample of professional reinsurers operating in the United States. During the first six months of 1984, these reinsurers incurred 26.2 percent more in losses and expenses than was collected in reinsurance premium. According to industry analysts, these poor underwriting results can be attributed to excess underwriting capacity and intense competition throughout the industry. The obvious consequences of such an extended period of steadily worsening underwriting results have led reinsurers to take measures aimed at restoring profitability to underwriting. Profitability-restoring measures include, but are not limited to, redirecting reinsurance capacity to relatively stable and more profitable lines of business and commanding more favorable terms when negotiating or renegotiating treaties. More favorable terms include increased reinsurance premiums, lower commissions paid to ceding companies, and reduced loss exposure obtained by lowering reinsurance limits and restricting the scope of reinsurance coverage provided. All of these responses are intended to improve overall underwriting results.

EXHIBIT 7

Combined Ratio Results
Reinsurance Industry

| Year | Combined Ratio[a] |
|---|---|
| 1979 | 102.2 |
| 1980 | 105.2 |
| 1981 | 106.1 |
| 1982 | 112.3 |
| 1983 | 115.6 |
| 1984[b] | 126.8 |

Source: Reinsurance Association of America

[a] The ratio of losses plus expenses to premium. A ratio of 110.0 means that $110 in losses and expenses were incurred for every $100 in premium earned.
[b] First six months.

A second factor contributing to constriction of the EIL insurance market is an increasingly negative view, held by some reinsurers, toward reinsuring third-party liability risks in general and EIL risks in particular in the United States. This negative view reportedly reflects a belief that tort liability damages awarded by American courts are unpredictable and often excessive. The lack of extensive claims experience and the catastrophic potential associated with EIL insurance makes that line especially subject to such views. In fact, one of the two EIL programs that withdrew from the market nationwide in 1984 did so because it was unable to renegotiate a reinsurance treaty.

Initial EIL claim losses have also contributed to the constriction of the market nationwide. As Exhibit 3 above shows, the frequency and severity of EIL claims increased nationwide from 1982 to 1983. Although claim losses for those years remained well below premium income, suggesting underwriting profitability, the direction of change suggests a possibility that premium revenue may be inadequate in the future if claim frequency and severity continue to increase.

The trends described above indicate a constriction of the EIL insurance market nationwide; however, constriction of the market has been even more pronounced in Minnesota due to the response of EIL insurers to the Minnesota Environmental Response and Liability Act. In response to MERLA, EIL insurers have either refused to insure any Minnesota risks or have somehow restricted their participation, or willingness to participate, in the Minnesota EIL insurance market.

EIL insurance programs were surveyed to determine their willingness to insure Minnesota risks subsequent to the adoption of MERLA. Exhibit 8 summarizes the results of that survey. Four EIL insurers reported an unwillingness to insure any Minnesota risks under any circumstances. Each of the remaining four EIL insurers reported a qualified willingness to insure Minnesota risks. One of those insurers indicated that it would consider insuring a Minnesota risk only if that risk were insured under a policy insuring numerous multi-state locations. That insurer also indicated that a policy insuring a Minnesota risk would likely require a higher premium, a higher deductible, and/or lower liability limits in recognition of the Minnesota exposure. The other three insurers indicated a willingness to consider insuring Minnesota risks, but also indicated that a Minnesota risk would be more closely evaluated or more selectively underwritten in recognition of MERLA.

EXHIBIT 8

EIL Insurer Responses to MERLA

| Insurers indicating restricted participation in the Minnesota market | Insurers that refuse to insure any Minnesota risks under any circumstance |
|---|---|
| Shand, Morahan & Company | Hartford Insurance Company |
| American International Group | Home Insurance Company |
| Travelers Insurance Company | Swett & Crawford Management Company |
| Pollution Liability Insurance Association | Stewart Smith Mid America, Inc. |

The four insurers indicating an unwillingness to insure any Minnesota risks reported issuing or renewing 15 EIL policies insuring Minnesota risks in 1983; therefore, it appears likely that at least this number of businesses in the state were immediately affected by the decision of those insurers not to insure any Minnesota risks.

New applicants for EIL insurance are more likely than current insureds to be affected by the decisions of the four remaining insurers to limit or restrict their participation in the Minnesota market. The nature and extent of these possible effects cannot be determined due to the generally subjective nature of EIL underwriting, the inability of insurers to specify precisely how EIL underwriting and pricing was altered in response to MERLA, and the unknown future demand for EIL insurance in Minnesota.

## UNCERTAINTIES AFFECTING FUTURE MARKET DEVELOPMENT

Future development of the EIL insurance market, both nationwide and in Minnesota, faces four major areas of uncertainty, the first of which is buyer demand. Buyer demand for EIL insurance has fallen far short of early industry expectations. Insurers originally expected widespread demand for EIL insurance as businesses became more aware, and wary, of their exposure to pollution-related liability. Although recent trade-press reports do indicate an increased interest in EIL insurance, unless this increased interest results in a substantial increase in demand for EIL insurance coverage, it seems unlikely that insurer participation in the market will increase beyond its present level.

A second area of uncertainty is EIL claims experience and litigation involving nonsudden pollution incidents. Environmental damage caused by the nonsudden release of hazardous substances is a relatively new phenomenon, and it is widely believed that the true extent of the problem will not be known for several years. EIL claims experience to-date may or may not prove to be an accurate indication of future claims experience. In any case, insurer participation in the EIL market will depend, to some extent, on how EIL claims experience

develops. In general, insurer participation will be discouraged if claims are more catastrophic and less predictable than expected.

A third uncertainty in the future development of the EIL insurance market is the general financial health of the insurance and reinsurance industries. It was concluded earlier that adverse underwriting results throughout the reinsurance industry had a direct impact on the EIL insurance market. In addition, one withdrawal from the market was due to that insurer's poor underwriting results in all lines of business and the subsequent decision to discontinue all business nationwide. The small size and high-risk nature of EIL insurance makes it particularly susceptible to adverse industry-wide conditions and insurer responses to such conditions.

A final uncertainty is the possibility that all insurers may eventually exclude sudden releases from coverage under policies of Comprehensive General Liability (CGL) insurance. The Insurance Services Office (ISO) recently decided to revise its advisory CGL form to exclude from coverage any environmental-related liabilities. Formerly, the ISO CGL form only excluded nonsudden releases from coverage.

ISO is a bellwether in the insurance industry. Even companies that do not utilize ISO services or policy forms often emulate those that do. Only one current EIL insurer, PLIA, is known to utilize the ISO form for EIL coverage, which provides sudden as well as nonsudden coverage.

The decision to exclude all environmental-related liabilities came in response to recent court decisions that found the sudden and non-sudden distinction to be ambiguous, arbitrary, and unworkable. With those decisions, insurers found themselves with nonsudden exposure that had not been considered in the pricing of CGL coverage. With the new ISO form, insureds may be able to purchase coverage for sudden or nonsudden releases on a buy-back basis only. It is not known whether coverage for sudden and nonsudden releases will be available separately or only together.

Excluding all pollution-related liabilities from CGL coverage could produce a substantial increase in demand for EIL insurance. This depends, in part, on the extent to which non-ISO companies follow the lead of ISO, and the willingness of those insurers to sell back coverage for sudden releases. If numerous insurers follow ISO's lead, as appears to be happening, and if CGL buy-backs of sudden coverage are not possible, then businesses that want sudden coverage will look to the EIL market. (Most EIL insurers exclude coverage for sudden releases but do allow for a buy-back of this coverage.) This development could also result in an increased interest in nonsudden coverage as businesses are forced to reexamine their overall insurance situation. The new ISO CGL form is tentatively scheduled to go into effect January 1, 1986.

The uncertainties described above--uncertain demand for EIL insurance, developing EIL claims experience, overall financial results throughout the insurance and reinsurance industries, and the possible unavailability of insurance for sudden releases--all create uncertainty with respect to future development of the EIL insurance market. This uncertainty applies to the EIL market nationwide, but is magnified in Minnesota by an additional element of uncertainty, namely, whether MERLA will have any effect on the frequency of litigation and claims, and the extent of liability resulting from the nonsudden release of hazardous wastes in Minnesota.

The reactions of insurers to MERLA were based on the belief that the act's liability provisions could, or would, increase the frequency of pollution-related litigation in Minnesota and make nonsudden pollution liability exposures in the state uninsurable. How the act's liability provisions relate to the concept of insurability is the subject of the next section. With respect to the frequency of litigation, four complaints are known to have been filed in Minnesota courts seeking damages under the liability provisions of the act. None of these cases has yet been litigated; however, concurrent claims under common law and other environmental statutes suggest that the complaints would have been filed even in the absence of MERLA.

# INSURABILITY OF EIL COVERAGE UNDER MERLA

Following enactment of MERLA, four insurers and one reinsurer have indicated a refusal to extend EIL coverage to Minnesota risks. While the primary insurers' refusals were precipated, in part, by the withdrawal of the London-based reinsurance facility (ERAS) from the Minnesota market, it must be noted that ERAS subsequently withdrew from the nationwide EIL reinsurance market. Based on reported statistics for 1983, withdrawal of these insurers will directly affect 15 of the 27 policies issued by EIL insurers in Minnesota. These withdrawing insurers generally cite their belief that the provisions of MERLA relating to strict joint and several liability, retroactivity, and causation are too vague and unpredictable to be insurable. Previous sections of this report have discussed the demand for and availability of EIL coverage in the U.S. and Minnesota. This section examines the question of "insurability" of section 5 liabilities for personal injury, economic loss, and property damage under nonsudden EIL policies.

Consistent with the previous discussion of EIL insurance availability, this review does not extend to examination of the insurability of sudden exposures, which are covered under the current CGL policies generally in use throughout the insurance industry. Under such CGL policies, third-party damages that arise from specific identifiable actions (or omissions) of the defendant will be compensable events. Neither does the discussion of insurability of EIL coverage include examination of liability for on-site clean up costs or response actions, which are generally excluded under most EIL policies.

In the context of the legislative debate surrounding the consideration of a statutory cause of action for personal injury claims, critics of MERLA contend that the act unreasonably expands common law standards governing third-party liability claims for personal injury, economic loss and property damage.[1] These critics assert that substantial uncertainty exists regarding the manner in which courts will construe the following liability features of the act:

1. the availability of the designated affirmative defenses and limitations of liability to defendants;
2. the reasonableness and legality of applying retroactive liability to nonnegligent parties whose standard of conduct at the time of manufacture or disposal of a substance conformed to existing regulatory requirements;
3. the expansive scope of compensable damages available to plaintiffs;
4. the interrelationship of the act's statutory provisions addressing substantive and procedural evidentiary causation requirements;
5. the impact of the act's apportionment and contribution provisions upon comparative damage awards; and
6. the impact of the act's statute of limitations.

As discussed more fully below, some, but not all, of these concerns regarding interpretation of the act are shared by EIL insurers. In contrast to its critics, proponents of the act contend that MERLA primarily serves to codify common law remedies currently available to injured third parties in the emerging field of "toxic tort" litigation.[2] However, the Minnesota courts have not yet had the opportunity to decide any third-party personal injury cases arising out of exposure to toxic substances.

Resolution of the legal debate concerning the scope of MERLA's liability provisions and their impact on third-party damage claims arising from nonsudden exposures to hazardous substances can only occur through judicial construction of the affected statutes. Resolution of the debate concerning whether MERLA departs from common law liability standards is not, however, determinative of the issue of whether Minnesota EIL risks are insurable. Insurers will choose to insure, or not insure, risks based upon a multitude of factors related to their perception of the degree of risk posed by a potential insured. These factors relate to the ability of the insurer to establish an appropriate price to fund the expected losses arising under the coverage. In established lines of coverage, historic claims experience serves as the basis for projections of premium

rate level requirements. In mature coverage lines such as auto no-fault, products liability, and workers' compensation, the availability of historic claims experience and necessary reinsurance, together with the availability of sufficient underwriting tools to limit insurer exposure to loss, minimize the need for precise judicial construction of liability standards.

At the present time, no judicial interpretation of MERLA has occurred. In Minnesota, only 27 EIL policies have been identified and one compensable claim has been incurred since 1981. Because EIL coverage is such a new and evolving market with little statistically reliable claims experience, insurers must place increased reliance upon their subjective perception of the degree of risk involved in extending coverage. Of additional concern is the likelihood that personal injury claims arising from gradual exposures to substances are of potentially catastrophic proportions; that is, each actionable release of a hazardous substance may conceivably subject the insurer to liability to the extent of applicable policy limits.

While no attempt is made in this discussion to predict judicial reaction to MERLA's liability provisions, this review is primarily intended to identify the statutory provisions which serve as the basis for expressed concerns regarding the insurability of EIL risks. The underlying purpose for enactment of MERLA was to provide statutory remedies for injured claimants. If the act serves as a source of additional recovery for common law plaintiffs, MERLA may be viewed as an expansion of common law liability.

PERSONAL INJURY LIABILITY FEATURES OF MERLA

Subject to specified defenses and limitations on causes of action, MERLA imposes the legal standard of strict liability upon parties "responsible" for injuries to persons and property caused by the "release" of substances designated as "hazardous" pursuant to regulatory action. (Sections 2, subds. 8 and 15; 3; 5; and 6.) In so doing the act codifies the common law strict liability standard previously applicable to injuries

relaxes certain procedural burdens which otherwise apply to the plaintiff's use of expert medical opinion in establishing a cause of action for personal injury or death claims. (Section 7.) The act applies to injuries occurring as a result of:

- releases which occurred or continued beyond July 1, 1983 (Section 15.),
- releases which result from hazardous substances wholly placed in facilities after January 1, 1960 (Section 6.),
- in the event of substances wholly placed in facilities prior to January 1, 1973, the act does not apply if the defendant establishes that the activity was not "abnormally dangerous" (Sections 6 and 15.)

A six-year statute of limitation applies from the date the injury accrues or becomes manifest. (Section 11.) Liability under the act is supplemental to that available under other causes of action. In the case of joint and several liability against a defendant, the liability is limited to twice the defendant's percentage of fault. (Sections 5, 7, 8, 9, and 12.)

General concerns have been raised regarding the act's ambiguities and imprecision in drafting.[3] However, in the debate relating to the insurability of the act's liability provisions, these issues may be discussed in the context of the strict joint and several liability, causation, and retroactivity features of the act.

A. Strict Liability

At common law, plaintiffs have traditionally relied upon four basic theories of liability: (1) negligence, (2) trespass, (3) nuisance, and (4) strict liability.[4]

Negligence - is defined as "conduct which falls below the standard established by law for the protection of others against unreasonable risk of harm." Where applicable statutes establish a standard of care, violation of that standard may constitute actionable negligence. However, in considering the issue of whether defendants have

exercised due care, courts will consider the standards in existence at the time of the defendant's act or omission. In the absence of regulatory classification of a substance as a hazardous waste, generators, transporters and disposers need only conform with the prevailing standards regarding the handling of substances.

Trespass - actions extend only to impairment of a plaintiff's possessory interest in land. As a result, it is of limited utility in obtaining compensation for personal injuries or economic loss unrelated to diminution in value of the plaintiff's real property. In the majority of jurisdictions, the accidental pollution of groundwater (i.e. contamination of drinking wells) is not grounds for liability in trespass unless the defendant has acted negligently or been found to have engaged in an "abnormally dangerous activity."[5]

Nuisance - Under traditional tort law, a nuisance is a substantial unreasonable interference with another's use and enjoyment of land. Nuisance is not a distinct type of tortious conduct, but rather is a type of harm which requires a balancing of the equities involved in the conduct. In resolving nuisance complaints, the court must weigh the utility of the activity against the gravity of the harm. Nuisance actions do not generally extend to personal injury claims, but would apply to actions involving diminution in value of the plaintiff's property.

Ultrahazardous (Abnormally Dangerous) Activity - In ultrahazardous activities (for example, dynamite factories or insecticide plants) society imposes liability upon those who economically benefit from the dangerous activity without regard to whether the defendant is at fault. Absolute liability for injuries arising from ultrahazardous activities is premised on the theory that certain activities, such as hazardous waste disposal, are abnormally dangerous and likely to result in injury. Additionally, if a person engages in

> "non-natural" use of land, the tendency of which is to cause injury or nuisance to others, that person is liable for all injuries resulting from such use.

Few common law cases exist which apply traditional common law theories to third-party personal injury, economic loss, and property damage claims arising from exposure to hazardous waste. Moreover, the characteristically long latency periods that follow exposure to hazardous substances renders comparison of traditional common law liability theories imprecise. Additionally, given the lack of definitive evidence establishing the relationship between exposure to hazardous waste and subsequent health effects, several commentators have suggested that common law theories of liability are ineffective in hazardous waste cases.[6]

MERLA evidences an intent to apply strict liability standards applicable to ultrahazardous activities to all causes of action arising out of hazardous substance release. Section 5 provides:

> Except as otherwise provided in subdivision 2 to 10, and notwithstanding any other provision or rule of law, any person who is responsible for the release of a hazardous substance from a facility is strictly liable, jointly and severally.

This legal standard of liability is expressly applicable to common law actions brought under negligence, trespass, or nuisance theories of liability. Because toxic tort complaints maintained under common law liability theories will invariably plead all available alternative theories of liability, there is substantial doubt that the extension of strict liability to common law causes of action will prove to be a significant expansion of potential liability. Thus, in the context of the insurability of EIL coverage, this issue will be of little practical impact upon insurers' exposure to additional common law damage awards. This conclusion is strengthened by legal precedents arising under the newly emerging field of toxic tort litigation liability standards wherein the courts have expressed a

pronounced willingness to blur the technical distinction between the traditional causes of action in favor of fashioning remedies for injured claimants.7

Joint and Several Liability

The issues raised by generators relating to the joint and several liability features of the act stem from the perceived equities of subjecting defendants, who play relatively insignificant roles in the events from which damages arise, to liability for total damages incurred. For example, assuming the comparative fault standards are satisfied, if defendant A is held to be responsible for five percent of the damages incurred by the plaintiffs, said defendant is liable for that portion of damages uncollectible from judgement proof co-defendants. However, section 9 of the act limits the amount which any single plaintiff will have to pay to a sum equal to twice the percentage of apportioned fault. In the above example, the maximum amount defendant A would be liable for would be equal to ten percent of the plaintiff's incurred damages (subject to application of the comparative fault standards). This issue is of more critical concern to "innocent" responsible parties. This issue, involving the equitable apportionment of damage among responsible co-defendants may have a varying affect upon the ability of some generators, transporters or owner/operators to obtain insurance. However, this concern has not been raised by insurers as an insurability issue.

B. Causation

From the insurers' perspective, the act's provisions which address the issue of causation and the respective burdens of proof required by plaintiffs and defendants are the most critical elements in determining "insurability." (See Sections 7, 5, and 10.)

Section 7, which applies only to claims for death, personal injury or disease, states:

> In any action brought under section 115B.05 or any other law to recover damages for death, personal injury, or disease arising

> out of the release of a hazardous substance, the court may not direct a verdict against the plaintiff on the issue of causation if the plaintiff produces evidence sufficient to enable a reasonable person to find that:
>
> (a) the defendant is a person who is responsible for the release;
>
> (b) the plaintiff was exposed to the hazardous substance;
>
> (c) the release could reasonably have resulted in plaintiff's exposure to the substance in the amount and duration experienced by the plaintiff; and
>
> (d) the death, injury, or disease suffered by the plaintiff is caused or significantly contributed to by exposure to the hazardous substance in an amount and duration experienced by the plaintiff.
>
> Evidence to a reasonable medical certainty that exposure to the hazardous substance caused or significantly contributed to the death, injury, or disease is not required for the question of causation to be submitted to the trier of fact.
>
> Nothing in this section shall be construed to relieve the plaintiff of the burden of proving that the defendant is a person responsible for the release and of proving the causal connection between the release of the hazardous substance for which the defendant is a responsible person and the plaintiff's death, injury, or disease.

As such, section 7 evidences an intent to leave unchanged the substantive evidentiary standard on which liability for death, personal injury, or disease may be imposed. In describing the insurance industry's objections to the act, one industry spokesperson stated:

> This link under the superfund law is far more tenuous and uncertain, in our opinion, than what is required under common law. It is far

> more speculative than what a plaintiff must show in any other tort litigation. The words causing the problem from an insurance perspective very clearly alter the common law by providing that "evidence to a reasonably medical certainty that exposure to the hazardous substance caused or significantly contributed to the death, injury or disease is not required for the question of causation to be submitted to the trier of fact." This is a significant deviation from the common law and the crux of the insurability problem.8

This concern was alluded to in an earlier statement by ERAS (the London-based reinsurer) in explaining its decision to withdraw from the Minnesota EIL market.

> The subtle change of standard governing the submission of issues to the trier.....coupled with the removal of the need to show reasonable medical certainty seem to alter the position dramatically from normal common law rules particularly as the criteria themselves are considerably weakened because of difficulty of absolute proof.
>
> Our belief is that the Act allows a plaintiff simply to show: "I have cancer, cancer may be caused by goo, you handle goo, so you are liable." This is equivalent to allowing an accident victim to hold any Ford owner strictly liable because he was hit by a Ford. We believe that if the position was that the accident victim had to show that it was a Blue '78 Mustang and that the defendant habitually drove such a Ford along the back road in question at the time of day the victim was hit, the burden of proof would be tolerable.

> However, as the law stands we feel that the burden of proof is unreasonably altered to the stage where we cannot provide insurance for the onerous liability regime it imposes. We had argued, unsuccessfully, for alterations to the bill, so that we could continue to provide insurance.[9]

These criticisms apparently derive little comfort from the express language in section 7 which provides that, "Nothing in this section shall be construed to relieve the plaintiff of the burden of proving that the defendant is a person responsible for the release and of proving the causal connection between the release of the hazardous substance for which the defendant is a responsible person and the plaintiff's death, injury, or disease."

As a procedural evidentiary matter, this concern is also addressed by the provisions of the Minnesota Rules of Civil Procedure relating to judgment notwithstanding verdicts. In this regard, Rule 50.02(1) allows the court to direct a verdict in favor of the defendant "if the moving party would have been entitled to a directed verdict at the close of the evidence."

In summarizing the intent and application of the MERLA causation provision, Attorney General Hubert H. Humphrey III commented:

> The Minnesota causation provision does not change the burden of proof of causation, nor does it create any evidentiary presumptions that favor the injured party. Instead, the law addresses two other questions: first, what kind of evidence is necessary to get the case before the jury; and second, what degree of medical certainty of expert medical testimony is required to get that evidence to the jury? I believe that what the Minnesota law provides on those two questions is largely, though not entirely, a restatement of the way that the common law would

> treat the causation problem. This accomplishes the goal of making these common law principles visible and certain for plaintiffs, defendants, lawyers, and judges. But I do not think that the provision substantially shifts the balance in favor of injured victims.[10]

This view of the impact of the causation language is shared by at least one other legal commentator.[11]

The insurers' concerns regarding the insurability of the causation features of the act perhaps stem from language in section 7 and other related portions of the act which address both procedural and substantive evidentiary standards. (See: Section 5, subds. 6 and 10; and Section 6.) While it is expressly provided in section 7 that the ultimate substantive burden of proving causation remains with the plaintiff in causes of action for death, personal injury or disease, substantial concerns exist regarding how courts and juries will distinguish between the substantive and procedural evidentiary burdens referenced in the act.[12]

The implicit concern of ERAS and the insurance industry appears to stem from the possibility that juries will relax the substantive evidentiary standard applicable to the plaintiff's burden of ultimate proof in the same manner as the statute relaxes the procedural evidentiary standards required for submission of a case to the jury. Given the unique nature of personal injuries arising from gradual exposure to hazardous waste, the ability to establish with reasonable medical certainty that the injury in fact arose from exposure to chemical substances has been identified as the primary barrier to recovery under common law causation standards. This is especially true where long latency periods between exposure to a substance and the emergence of adverse symptoms are involved. In the instance of exposure to latent hazardous substances (for example, asbestos and DES), an additional problem of common law proof arises from the plaintiff's inability to identify the responsible defendant. Under traditional common law principles, failure to provide testimony establishing a

reasonable medical certainty that the injury is directly attributable to exposure to the defendant's release may result in dismissal of the claim.

Other Allocations of Burden of Proof

Other provisions of the act make reference to the respective "burdens" to be met by either plaintiffs or defendants. The defenses to liability set forth in section 6, Subd.1, clauses (c) and (d) "...apply only if the defendant establishes that he exercised due care with respect to the hazardous substance concerned..." in light of known or foreseeable circumstances these defenses are available only upon an affirmative showing that the defendant is entitled thereto. Similarly, the act's exemption from liability for release of hazardous substances wholly placed in facilities between January 1, 1960, and January 1, 1973, is available only upon a showing by the defendant that the activity engaged in is not "abnormally dangerous." Such references serve as a basis for insurer concerns that the act unreasonably shifts the burden of proof to the defendant, rendering the liabilities assumed thereunder uninsurable.

The accuracy of the insurers' opinion of the impact of the act's causation and burden of proof requirements reflects the perception that juries are lenient in awarding compensation to innocent victims injured in commercial transactions. Such a perception no doubt affects insurer decisions as to whether liability claims should be settled or proceed to trial. The risk of substantial jury awards will encourage out-of-court settlements and can reasonably be anticipated to affect the ultimate payout of losses under EIL coverages. In turn, this perception of the degree of risk and the ability of plaintiffs' personal injury claims to reach the jury will ultimately affect an insurer's judgement as to the advisability of insuring EIL risks.

C. Retroactivity

MERLA's application of contemporary and prospective liability standards to conduct and releases which occurred prior to designation of a substance as

hazardous poses particular problems for generators, transporters, and disposers. As characterized by one commentator:

> The retroactivity of MERLA extends back as far as 1960. The retroactivity of MERLA antedates industry recognition of many of the wastes as hazardous substances and antedates the regulation of nearly all of the substances. There is no correlation between the dates particular substances first became regulated and strict liability under MERLA.[13]

Through the use of available underwriting tools (for example, risk assessment studies, claims-made policies with retroactive dates, and exclusionary endorsements), insurers are capable of limiting their exposure to retroactive liability. Consequently, the issue of retroactivity is not a general question of "insurability" of Minnesota EIL coverages. However, this issue is one which may impact specific insureds or generators with respect to their ultimate ability to obtain coverage at an affordable price.

The act attempts to provide equitable limits upon the extension of statutory liability to past conduct of "responsible" non-negligent parties by the designation of certain liability cut-off dates (section 15) and the allowance of designated affirmative defenses available to certain landowners and transporters (section 3, subds. 1(c) and 3). Under the act, liability is placed upon "releases" which occur on or after July 1, 1983. (Section 15.) Liability does not attach to "release" of hazardous substances "wholly" deposited in or on a facility before January 1, 1960. (Section 6.) Similarly, substances which are "wholly" deposited in or on a facility prior to January 1, 1973, may escape liability if the defendant establishes that the activity was not "abnormally dangerous." (Section 6.)

In an attempt to balance the equities involved in application of retroactive liability to non-negligent parties, the act creates exemption from the definition of "responsible person" for transporters and facility owner/operators (section 3, subd. 1), for innocent

landowners upon whose property facilities are located (section 3, subd. 3), and innocent transporters of household refuse (section 5, subd. 5). The act does not however provide comparable relaxation of retroactivity standards for hazardous waste generators.

INSURABILITY

The third-party liability features of MERLA are not "uninsurable" in the absolute sense. Several insurers continue to offer EIL coverage to Minnesota exposures and many insurers provide coverage for sudden occurrences under CGL policies. The concept of statutory strict liability is not a unique or inherently uninsurable concept. Strict liability features are present in auto no-fault, workers compensation, and products liability personal injury compensation mechanisms. Strict joint and several liability mechanisms are arguably present or developing in jurisdictions which recognize the emerging liability principles of "toxic tort" litigation.

Likewise, the concept of providing coverage for events and liabilities which occurred in the past (retroactivity) does not generally cause such risks to be uninsurable. Through the widespread use of claims-made policies, insurers extend present day coverage to events and conditions which, in the instance of products liability, medical malpractice, and occupational disease coverages, occur several years prior to discovery of a compensable claim. However, the inherently subjective nature of EIL underwriting and pricing, when coupled with the restriction of reinsurance markets, magnifies the degree of risk assumed by the primary insurers in extending coverage. This perception of risk is enhanced by insurers perceived ambiguities of the strict liability, causation and retroactivity features of MERLA.

In the absence of reliable claims data, the degree to which EIL coverage is insurable, both in Minnesota and nationwide, will be based upon the effectiveness of the risk selection, underwriting and loss prediction tools currently in use in the EIL market. These tools are generally designed to accomplish three principal objec-

tives for the insurer: (1) to place meaningful limitations on the duration of the insurer's exposure to potential losses; (2) to differentiate between the quality of risks seeking coverage; and (3) to place realistic limitations on the scope of coverage provided. The ability of insurers to accomplish these objectives is no doubt affected by their perceived uncertainties regarding judicial construction of the strict liability, causation and retroactivity features of MERLA.

The insurers perception of the degree of risk presented by Minnesota EIL exposures will be affected by uncertainty of judicial construction. However, while valid concerns exist regarding the scope and application of MERLA liability features, the issues most critical to an assessment of the "insurability" of EIL coverage in Minnesota relate to general concerns which impact the EIL market nationwide: the absence of statistically significant claims experience, lack of buyer demand, the availability of adequate reinsurance coverage, and the inherently subjective nature of the underwriting and pricing process. Clarification of present statutory ambiguities regarding the intended limitations of MERLA personal injury liability provisions may improve the willingness and capability of insurers to provide coverage for Minnesota risks.

1 See, Espel, The Minnesota Environmental Response and Liability Act, 16 Nat. Res. Law. 407 (1984); and Johnson, Minnesota's MERLA: Federal Superfund and Beyond, Env. Lawyer, (Summer, 1983).

2 See, DiBenetto, Generator Liability Under the Common Law and Federal and State Statutes, 39 Bus. Law. 611 (1984); Hall, The Problem of Unending Liability for Hazardous Waste Management, 38 Bus. Law. 593 (1983); Section 301(e) Report: "Injuries and Damages from Hazardous Wastes - Analysis and Improvement of Legal Remedies - A Report to Congress," Sen. Rept. No. 97-12 (Sept. 1982); Minnesota Waste Management Board, "A Report on Allocation of Liability Among Owners, Operators, and Users of a Hazardous Waste Disposal Facility," February, 1984; and Testimony of Minnesota Attorney General Hubert H. Humphrey III before the U.S. Senate Committee on Environment and Public Works, "Concerning the Enactment and Implementation of the Minnesota Environmental Response and Liability Act," Washington, D.C., July 31, 1984; for discussion of statutory and common law remedies applicable to toxic tort actions.

3 See, Espel and Johnson at note 1.

4 See, Hall and DiBenetto at note 2.

5 See, DiBenetto, at note 2, p. 618.

6 See, DiBenetto, at note 2, p. 620.

7 See, Hall, at note 2.

8 Ralph J. Marlatt, President, Insurance Federation of Minnesota, letter to editor, Minneapolis Star-Tribune, November 18, 1984.

9 R. Malcom Aickin, Director, ERAS (International) Limited, in correspondence dated February 14, 1984, to the American Insurance Association.

10 See, Testimony, at note 2, p. 11.

11 See, Espel, at note 1, pp. 432-433, citing Hinrichs vs. Farmers Grain Cooperative, 333 NW2d 639 (Minn. 1983).

12 See, Espel, at note 1, pp. 434-435.

13 See, Espel, at note 1, p. 430.

# SUMMARY

Environmental impairment liability (EIL) insurance is a relatively new product that grew out of the emergence of nonsudden pollution incidents as a major environmental problem. When nonsudden pollution problems emerged as a major potential source of liability in the early 1970s, insurers amended their widely used comprehensive general liability (CGL) policies to exclude from coverage liabilities resulting from the nonsudden release of hazardous substances. Sudden releases continued to be covered. Several years after the nonsudden exclusion was incorporated into CGL policies, a handful of insurers began offering insurance products especially designed to provide coverage for nonsudden releases. These products are commonly termed environmental impairment liability insurance.

EIL insurance policies provide a narrowly defined range of insurance protection. Various terms and conditions, including important policy exclusions, distinguish what is from what is not insured. Not all policies are alike; in fact, they may differ in ways that may be of great importance to the insurance buyer.

Purchasing EIL insurance is a difficult, time consuming, and costly process. The small size of the EIL insurance market means that the insurance buyer may have to search extensively, often outside its usual markets, for coverage. The EIL insurance buyer must often arrange and pay for an environmental risk assessment of the location(s) to be insured. The risk assessment, often costing several thousand dollars, examines various issues and factors supposedly related to the possibility of environmental damage occurring.

EIL underwriting and pricing are highly subjective, and likely to remain so until the claims experience needed to statistically relate characteristics of loss exposures to the actual probability of loss becomes available. EIL claims experience is not yet sufficient to allow insurers to confidently distinguish among EIL risks using statistically developed risk classifications. From 1981 to 1983, eleven of twelve active EIL insurers had approximately 300 EIL claims reported to them nationwide. Eight of those claims originated in Minnesota. Since the adoption of the Minnesota

Environmental Response and Liability Act, four complaints seeking damages under the act are known to have been filed in Minnesota courts.

Reinsurance plays a critical role in the EIL insurance business. Without substantial reinsurance protection, an insurer cannot provide meaningful EIL coverage without also risking its own financial solvency. Reinsurance arrangements and conditions have a direct impact on the nature of the coverage offered by EIL insurers in that an insurer is unlikely to provide coverage that is not also covered by its reinsurer.

The EIL insurance market is extremely small. Nationwide, less than $35 million in business was conducted, and fewer than 2,000 policies were issued or renewed, during 1983. Fewer than 30 EIL policies, involving less than $400,000 in premium, insured Minnesota risks during that year. There are eight known active EIL insurance programs in the United States.

A major reason for the small size of the EIL market is the small demand for EIL insurance. A survey of Minnesota hazardous waste generators indicated that 14 percent of those surveyed were insured for liabilities resulting from the nonsudden release of hazardous substances. Of those businesses uninsured, nearly half indicated that they did not need insurance. A smaller proportion of large-volume generators indicated that they did not need insurance. These generators indicated other reasons for not being insured.

The EIL market is constricting nationwide. In 1984, two EIL insurance programs, involving four insurance companies, were discontinued and no new programs were introduced--the first year since 1980 that this occurred. In addition, EIL premium costs are increasing and maximum liability limits, in many cases, are decreasing. Factors leading to the constriction of the national EIL market include the following: poor underwriting results throughout the reinsurance industry, the increasingly negative attitude of reinsurers toward insuring third-party liability risks in the United States, and EIL claim losses.

The EIL market in Minnesota has become even more constricted following the adoption of the Minnesota Environmental Response and Liability Act. Four insurers, together insuring 15 Minnesota risks in 1983, presently indicate an unwillingness to insure any risks in the state. The remaining four active insurers have responded to MERLA by imposing additional underwriting safeguards on their risk selection process.

Future development of the EIL insurance market, both nationwide and in Minnesota, faces four major areas of uncertainty: buyer demand, EIL claims experience, the general financial health of the insurance and reinsurance industries, and the availability of insurance for sudden releases. With respect to the Minnesota market, the frequency of litigation and the judicial construction of the liability provisions of MERLA can be added to this list.