

ENVIRONMENTAL RISK MANAGEMENT IN COMMERCIAL REAL ESTATE TRANSACTIONS

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Changes in the real estate industry have led to changes in how environmental risks are perceived in commercial real estate transactions. Traditional financing mechanisms for real estate are evolving, and traditional lenders are changing their business models as a result.

The real estate market is hot, and there has been an upsurge in real estate activity in many markets. Many real estate lenders are moving from single-site, long term mortgages, to packages of properties offered as a commercial mortgage-backed securities (CMBS) deal.

As insurance companies demutualize and offer public stock, there is pressure to produce stock-like returns. For real estate lenders, this means they must improve liquidity through a reduction in their equity portfolios. At the same time, property values in many markets have improved, and real estate players are capitalizing on the increased value, and improve their ratings with the rating agencies.

Lenders are changing their business models. Many companies are moving away from return based deals, to a fee-based business for third party investors. Some third-party investors are willing to accept risks in a deal that the most conservative lenders would not--provided that the potential returns justify the risks.

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All of these changes in the real estate industry have led to changes in how environmental risks and liabilities are evaluated.

Volatility in the real estate and financial markets has increased competition for deals, and fostered concessions and a relaxation in underwriting criteria. Environmental conditions are an area in which concessions are being made. Investment managers are being forced by the marketplace to accept greater environmental risks, and consider lower class rated properties.

On the other hand, some real estate firms are losing quality business deals due to outmoded underwriting of environmental risks. These firms take the approach that they will not participate if there is any asbestos (even encapsulated), if there are any underground storage tanks (even new ones), if there is any groundwater contamination (even from an off-site source).

For each environmental feature or situation, the nature of the risk varies with the role and perspective of the particular transaction participant. Similarly, the risk advice given does not apply to all the participants in the same way in a transaction. For example, the greatest risk for the owner of a class “B” building full of asbestos may be a third party tort claim from a tenant or employee of the building. For a lender, the risk may be to what extent the asbestos devalues the property and affects the ability to flip the property if it is foreclosed upon. For a developer planning to redevelop the site, the risk may be the cost to remove the asbestos as part of her demolition costs.

Some of the obvious impacts of environmental hazards on real estate transactions are:

- Reduction in collateral value of the asset
- Inability of a borrower to repay a loan, due to unforeseen environmental compliance costs
- Loss of loan priority to a clean up lien
- Lender liability
- Governmental imposed institutional controls and deed restrictions that look like property covenant to a buyer
- Inability to pursue foreclosure remedies
- Incurring a costly clean up for problems you did not cause
- Third party tort liability
- Inability to sell a property in a down turned marketplace

- Contingent liability into perpetuity
- Major delays in development or inability to develop

Environmental Consultants

Environmental experts play a role in helping real estate professionals understand and manage environmental risks and liabilities. The environmental expert you put on your team must be a key team member, and not just another service provider.

Unfortunately, too many environmental consultants do not understand the real estate business well enough to be a key member of the team. Too many do not share the same values of the rest of the team, and too many do not realize that the ultimate objective is to close the deal. Such consultants may see their role as to speculate how the smallest environmental problem could become a major hazardous waste issue. They cloud the truth, instead of clarifying your business opportunity.

The Nature of Risk

Several risk premises must be accepted in order to properly understand and underwrite the environmental risk in a transaction;

- There is no such thing as zero risk. Risk is inherent in any business activity.
- There is no such thing as zero contamination. Hazardous substances are ubiquitous.
- All risks are relative and fall on a continuum between small and large risks.
- Most environmental problems are in a manageable range
- No matter how good your risk management program is, you are bound to experience environmental problems in your real estate business.
- Someone will always be willing to own and operate a piece of real estate, regardless of problems
- Before conducting any environmental work, consider all possible outcomes. Be prepared to act upon the information you collect.

What you don't know can hurt you. What you do know can hurt you, too, if you are not prepared to act on what you know, or if you do not know what it means. Many real estate professionals hear that an environmental problem has been discovered in one of their deals, and they assume a worst case scenario. However, as noted above, environmental risks are relative and fall on a risk continuum. There is no such thing as zero risk, and it is a relatively rare circumstance when a real estate deal faces hundreds of millions in dollars of Superfund liabilities. If we cannot have the former, we want to avoid the latter.

This relative risk continuum appears as a bell shape curve. Initially, we may have little information, almost no idea where we are on the curve. As additional data are collected by a support team of consultants, attorneys and underwriters, the confidence level increases. As the confidence level increases, so do the costs of collecting the data. We will never collect enough data to reach the 100 % confidence level, so we need to balance the amount of money spent against the returns. Typically, this is done by phasing the work. At some point in the process, additional information does little to further clarify the risk. (Figure 1)

Consider an example of a dry cleaners in a retail deal.(Figure 2) The phase I environmental assessment indicates that one of the tenants has operated an active cleaning plant for the past ten years. Stains were noted in the space, and overall housekeeping was poor. With no additional data, we can easily envision the worst case scenario--a release of dry cleaning solvents has occurred, soils and ground water at the site have been grossly contaminated, a costly clean up will be required by the regulatory agency, and adjoining property owners will sue for millions.

Of course, we do not want to be the party who incurs those substantial cleanup costs, or defends the toxic tort lawsuits. However, as we continue to collect data, we learn that remedial subsurface investigations have been completed, the control agency is involved, clean up orders have been issued, remediation equipment has been put in place and operated for several years, and monitoring data show no migration off the shopping center property. This additional information has pushed our confidence over the top of the curve, toward the point where the risk is almost over.

When we have collected as much information as makes sense, we can draw an imaginary line across our relative risk curve. At this point, the tail of the

curve represents the real remaining risk in the deal. The next question is, "where is my risk comfort level?" Can you accept the remaining tail? Is it manageable? At this point, we have much greater confidence than when we started. We have moved beyond black and white risk underwriting.

What if the remaining risk is above your comfort level? In order to move to a lower risk level, we should consider what additional administrative, regulatory, or engineering options can be implemented to either further reduce the risk, or increase our ability to tolerate the remaining risk. Eventually, the risks are well understood, available options have been considered, and, from an environmental standpoint, the deal is as good as it is going to be. What remains is a business decision.

Factors Affecting the Degree of Risk

Potential environmental risks in any real estate deal can vary considerably. Factors that influence the risks include (1) the nature of the source of the problem, (2) environmental pathways for contaminant migration, and (3) environmental receptors or targets.

The interaction of these different factors is the key to understanding a particular risk. (Figure 3) The entire risk assessment process then becomes a logical step-by-step evaluation of the probability that any receptor or target will be impacted by any source of contamination through any pathway.

To have a measurable environmental risk at a site, a source, a pathway, and a receptor must all be present at a significant level of concern. In other words, there has to be some hazardous condition with the potential to release a dangerous substance, and some means by which that substance can move to where people or other resources are located and hurt them. The distinction between hazard and risk is that a hazard has the potential to cause harm, while a risk is an estimate of the probability that harm will actually occur.

The concepts of sources, pathways and receptors have been around for many years. However, the concepts recently have taken on greater importance in the current risk-based regulatory environment. Historically, almost any amount of contamination seemed to be too much for a regulator-- sites had to be cleaned to stringent standards based on assumptions that

children would eat dirt and drink groundwater, even where no children could reach the dirt or groundwater.

However, regulators have begun to tailor risk assessments to individual sites. This has fostered risk based responses by regulators, as reflected in a growing number of voluntary cleanup programs with flexible approaches to cleanups and cleanup levels. Under these programs, regulators are willing to work with owners of contaminated land in finding innovative measures (such as monitored natural attenuation) to restore land quickly to productive uses.

Inherent and External Risks

The number of potential environmental risks in a real estate deal varies based on the product type. A new "Class A" office building should pose fewer environmental risks than an old multi-tenanted industrial park. Environmental risks can be categorized as inherent or external.

Inherent risks are related to the physical aspects of a site, which includes operations, materials and facility elements. Such risks are can be managed through strategies of avoidance and abatement. There are many ways to reduce inherent risks. (Figure 4)

External risks are related to accident of place and time. By their nature, such risks are more difficult to identify and control than are inherent risks. For example, a manufacturer may be located above an area of regional groundwater contamination. Although the manufacturer may have always conducted its chemical operations properly, presence over the contamination presents a risk of liability. However, the manufacturer cannot simply move to a new location in order to facilitate the real estate transaction.

Inherent risks can be substantially reduced, but it often is not practical to eliminate them. Remaining inherent risks and external risks must be managed through risk allocation mechanisms. Example of common risk allocation mechanisms include:

- Quality and creditworthiness of the party
- Recourse deals for environmental and personal guarantees
- Performance guarantees
- Escrows, holdbacks, letter of credit

- In commercial loans, loan to value ratio
- Loan model amortization rate
- Tenant lease approval
- The amount of equity in the deal
- Right to substitute alternate security
- Cross collateralization of properties
- Risk transfer mechanisms
- Financial risk sharing among players
- Great financial returns in the deal for increase risks
- Insurance
- Secured contractual arrangements

The Risk Assessment Process

The risk assessment process for a real estate transaction normally begins with a Phase I environmental assessment, although it can include many other elements. Phase I environmental assessments have been standardized in the ASTM Standard Practice E-1527 document. Many institutions use this document as a basis to craft their own guidance document.

Modifications to the standard ASTM document should be considered, based upon the lines of business pursued by a particular real estate company and thus the kinds of information they need to collect in order to reach their risk comfort level. Generally, the scope of work for a Phase I assessment is designed to collect the kind and quality of information on which to base a business decision. It typically will collect information in the areas of liability, general compliance and risk.

The liability portion deals with a review of past property performance and operations. This historical review attempts to determine the legacy of potential or known contamination due to the postponement of an appropriate response action.

Environmental compliance typically is only a minor focus in the phase I assessment, which normally notes only those obvious areas of non-compliance. An example would be an underground storage tank noted in an assessment that has not been upgraded to current required standards. In order to really understand and manage environmental compliance, a property needs to be placed on an environmental compliance auditing program. This is

more appropriate for certain tenants in an equity portfolio than for traditional lenders.

The environmental compliance audit reviews present site conditions and operations, or reviews conditions from the last audit conducted up to the present. The audit normally includes a narrow time frame and attempts to measure current or recent operations and conditions against specific requirements and standards. An example would be a dry cleaners in a mortgage deal. If the lender decides to allow the dry cleaners to remain as a tenant, then a loan servicing requirement may be set up that requires an annual compliance audit and subsurface testing at the dry cleaners space. The audit results can be used to provide some assurance that operations are within acceptable norms, or they may point to problem areas that require closer management attention or additional study.

Without an ongoing audit program one may get a false sense of risk comfort. An environmental audit or assessment is a one time snapshot of conditions. Next week or next year, conditions may vary substantially, causing new and unforeseen problems or risks.

The risk assessment portion of the Phase I shifts to a future perspective with a prospective analysis of operations and the facility. The purpose is to assess the likelihood for environmental problems and determine appropriate measures for reducing the probability of incurring liability in the future. To reduce any identified potential risk, the assessment must consider failure mechanisms, such as leaking drums, spills in drains, etc., and if failure occurs, the effects of that failure. Failure does not have to be a catastrophic event; failure can result from a series of small, chronic problems.

In simple terms, the objective of the risk assessment is a set of prioritized recommendations that will reduce the risks and liabilities associated with a transaction.

The Consultant and Risk Management

The consultant's assessment report should provide details that will facilitate business decisions. The content of the report will be driven by the agreed-upon scope of work. Therefore, before you sign a contract scope of work, make sure that what will be produced will be valuable to you, based upon the particular line of business and the kind of deal that you are doing and

how you plan to use the information. The key to success is adequate communication with your consultant so that a mutually acceptable scope of work is established before the work begins.

Preparing a guidance document for the consultant helps provide this scope of work. As discussed above, the assessment should collect information that clearly identifies environmental sources or features, pathways for migration and environmental receptors and targets. There should be an agreement on the expectations and outcome of the report and mechanism that will assure the expected outcome. Some of the questions that should be answered by the report are;

- What are the sources of risk
- What events or series of events might lead to an undesirable situation
- What is the probability that an undesirable situation will occur
- What are the consequences if an undesirable situation occurs and are the consequences within an expectable or manageable range
- Are each of the events and actions leading up to a situation really possible or likely to occur
- Are there ways to prevent an occurrence
- How do the consequences of a given situation compare to it's likelihood of occurrence
- How important is avoiding the direct consequences of the situation, regardless of their likelihood
- Who is best able to reduce the risk

Conclusion

A good environmental risk assessment program must consider the following elements;

- There is no such thing as zero risk or zero contamination. Risk is inherent in any business, and to avoid failure, risk must be recognized and dealt with.
- Risk is relative and exists on a continuum.
- To assess risk, the scope of work for the environmental assessment must encompass collecting information on environmental sources, pathways for migration of a contaminant, and targets or receptors.

- Risk cannot be reduced or allocating effectively unless the primary decision makers understand what is at issue, and how environmental considerations could affect the specific transaction.

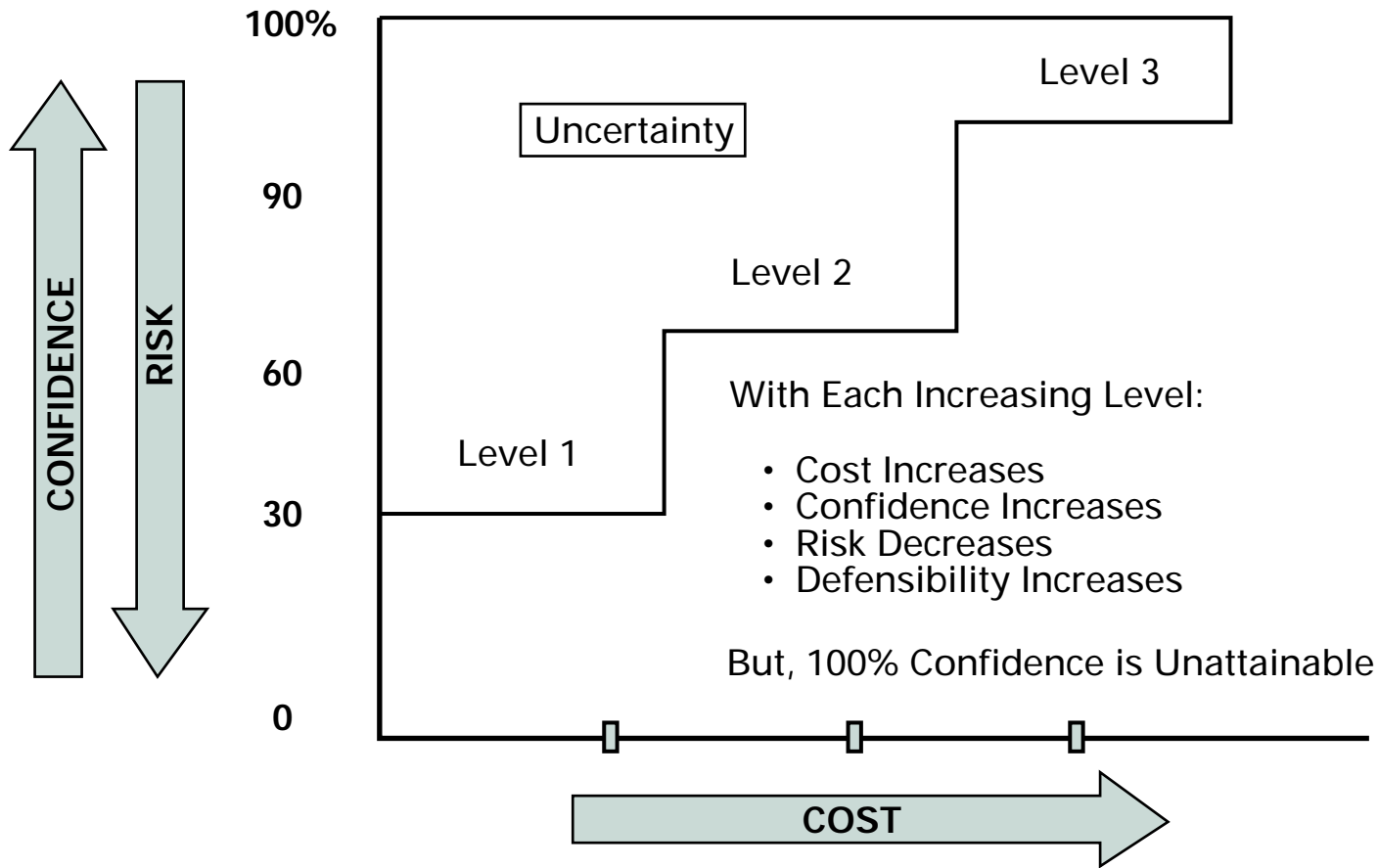


Figure 1. Confidence and Risk Versus Cost.

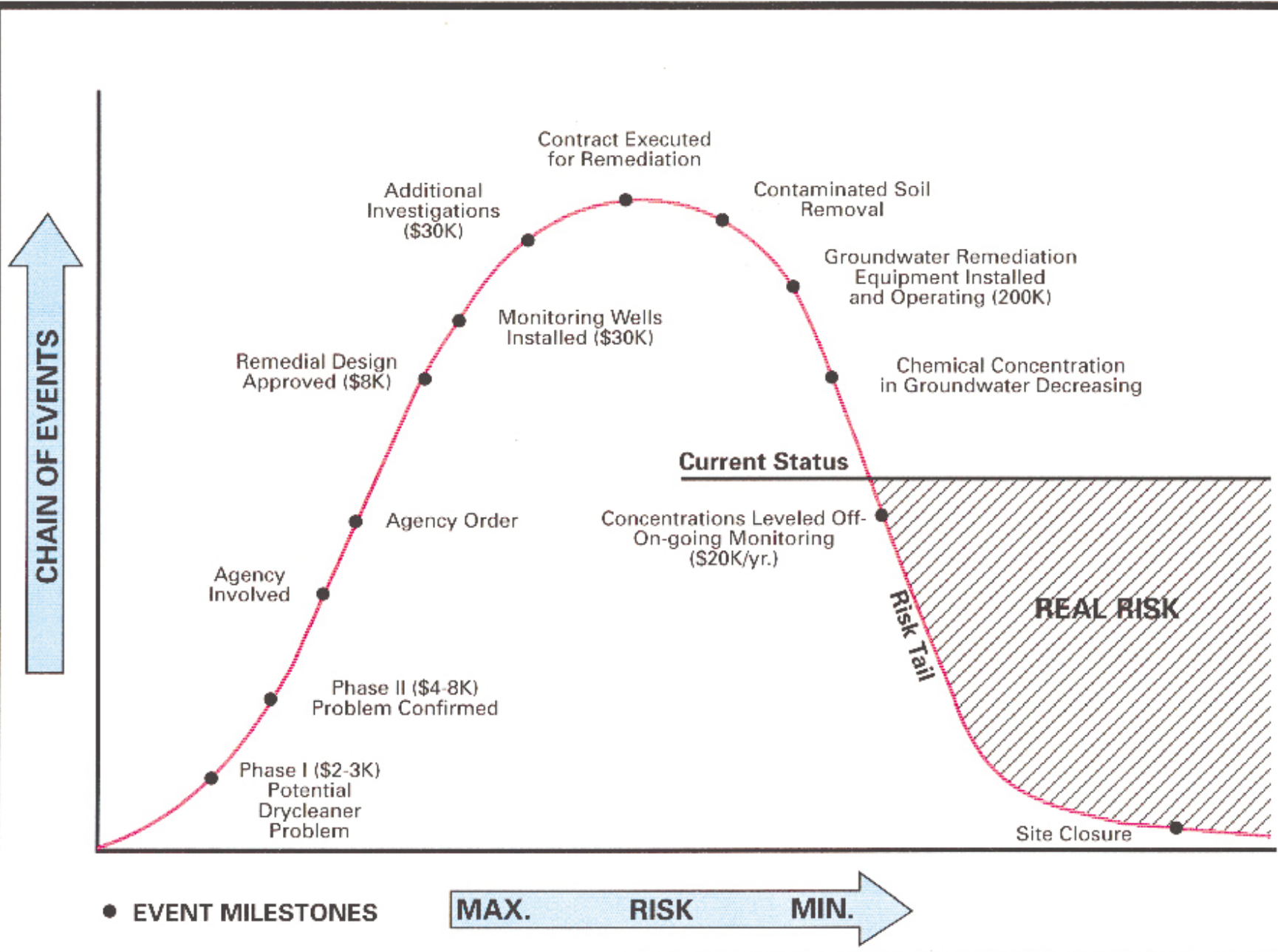


Figure 2. Environmental Risk Continuum Life Curve

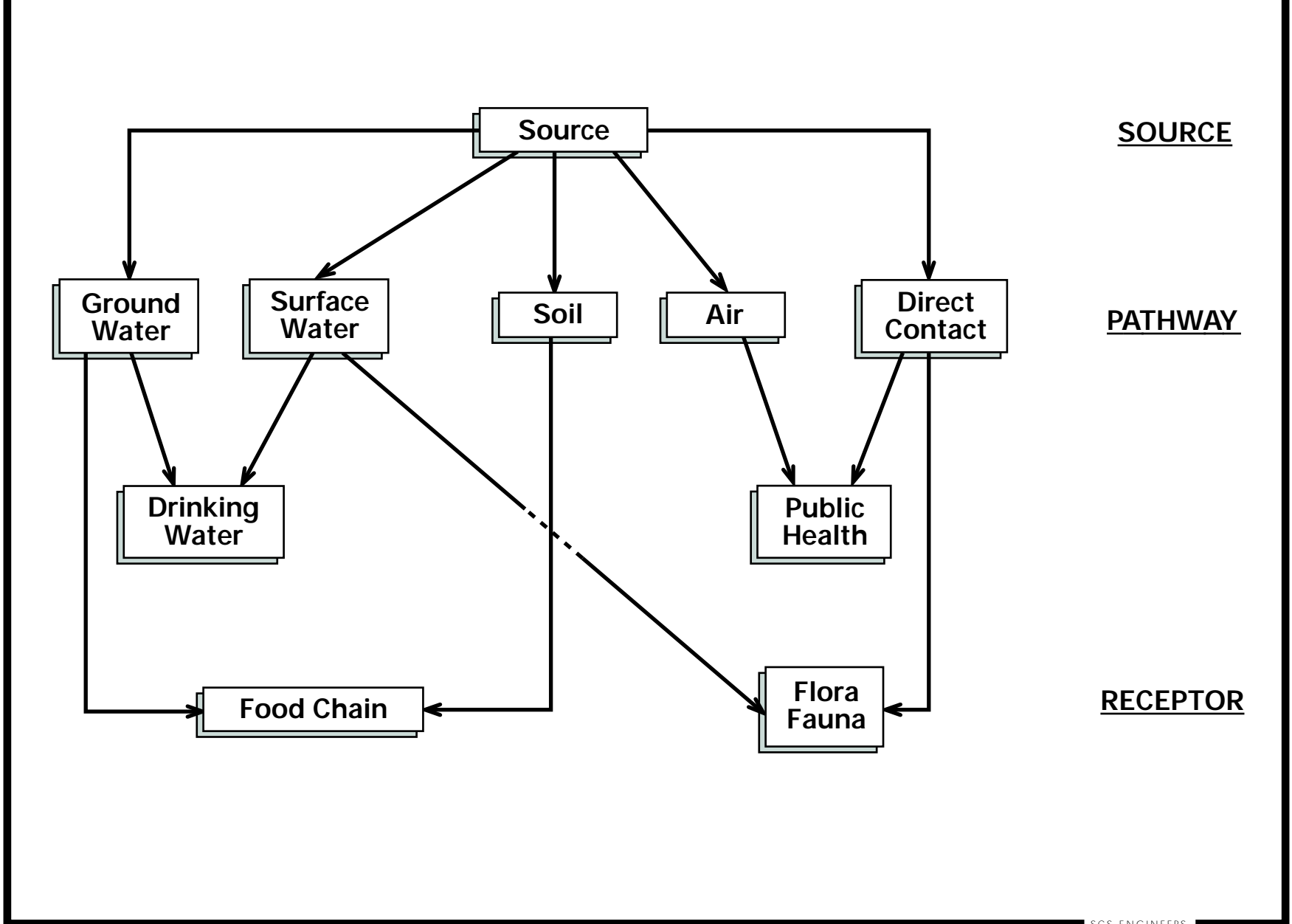


Figure 3. Interaction of Risk Factors, Potential Contaminant Migration Pathways and Receptors.

Inherent _____

Reduction Options _____

Chemical drums stored on soil

Provide spill containment

25 year-old underground storage tank

Remove tank

Multitenant facility with septic system

Eliminate, drains and point of entry, hook to sewer

Leaking PCB transformer

Replace transformer, remediate

Friable asbestos in poor repair

Remove damage or all friable material

Figure 4. Examples of Inherent Risks and Reduction Options.