



# Basic Risk Management for Consulting Engineers

An Online Continuing Education Course for Engineers

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# Basic Risk Management for Consulting Engineers

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## Section 1 OVERVIEW

Consulting Engineering encompasses a variety of disciplines and a very wide variety of professional services. It is inherently a risky business. The mere fact that an individual must be certified and issued a license to perform certain technical services implies that a minimum level of competence is required.

Regardless of how competent an engineer is or the care taken to perform impeccably, some level of conflict can easily arise due to miscommunication, unforeseen circumstances, or unintentional mistakes.

Whether we like it or not, we live in a litigious society. During the past twenty to twenty-five years, claims against architects and engineers have exploded, precipitating a liability crisis within these professions. Simultaneously and largely in response to these circumstances, the concept and practice of risk management has become more and more relevant and necessary for survival. Before an individual or organization can effectively develop, implement, and practice risk management, it is essential to understand the following:

- Theories of Liability (mostly those that typically confront a consulting engineer on a day-to-day or project-by-project basis)
- Conflict
- Claims
- Litigation

Risk management can be described as a collection of related guidelines, rules, practices and procedures designed to:

- Assess potential risk in particular sets of circumstances (e.g., a defined scope of work or project)
- Prevent circumstances or events that can lead to conflict, claims or litigation
- Mitigate conflict if it arises
- Minimize liability throughout the process of dispute resolution

An effective risk management program should employ both proactive and protective strategies.

### Roles of Organizations or Individuals (Parties) in a Construction Project

**OWNER:** Generally recognized as the party with a concept and a desire to evaluate a problem, to develop a new facility, or to expand an existing facility. The owner is responsible for project financing,

clear title and/or access to the parcel, timely payments to the parties involved, and adherence to local government rules. In construction, an owner often will contract directly with a general contractor; however, it is not uncommon for the general contractor to become a third-party beneficiary of the agreement between the owner and/or the A/E.

**ARCHITECT/ENGINEER (A/E):** Generally recognized as the party who develops designs to address and satisfy the concept, the A/E provides plans and written specifications for buildings and/or other works. In the classic project, the professional's duties are derived from provisions of the applicable standard contract forms prepared by the institutes such as AIA. In other projects, the A/E may be the project manager responsible for the coordination of all contractors, engineers, and suppliers.

**CONSULTANTS:** Generally recognized as the parties possessing the specialized expertise that is required for accomplishing the project.

**CONTRACTOR:** Generally recognized as the party who constructs or builds the project utilizing either his or her own labor resources or the labor resources and expertise of subcontractors.

**SUBCONTRACTOR:** Generally recognized as the party who is utilized by a contractor to provide specialized expertise and assistance in building the project.

**SUPPLIERS:** The parties providing supplies and materials for the project.

## Section 2            RISK MANAGEMENT STRATEGIES

### Proactive Strategies:

#### Elements of a Sound Proactive Strategy:

- Continuous Enhancement of technical expertise and competence
- Ready availability of competent business and legal support
- Effective design management
- Thorough understanding of project scope definition
- Strong quality assurance programs and effective documentation process
- Establishment and nurturing of personal/professional relationships with clients, subcontractors, vendors, and if applicable, with the public
- Regular, periodic training or continuing education on the nature of legal liability and risk management

#### Importance of the Individual in Effective Risk Management:

Regardless of the thoroughness of a risk management program, its effectiveness is largely dependent on how well an individual exercises good risk management practices on a day-to-day, project-by-project basis. Individuals who are well trained in the components of the Proactive and Protective Strategies can immediately recognize the signs leading to conflict or litigation, and can often mitigate the situation at a very early stage. Doing so often minimizes or eliminates any potential loss.

#### Indications and Signs of Potential Conflict:

The following are some common circumstances or situations that can indicate impending conflict that could lead to claims or litigation:

- Initiating or performing out of scope work without written authorization, a contract, or proper documentation. Such action most typically results in confusion over the scope of work, terms and conditions, and/or change orders.
- Vague or ambiguous scope of work definition.
- Any injury on the job site or a job site condition that is recognized by more than one individual as "hazardous."
- Use of the word "estimate." In the world of service contractors, the word estimate typically infers a not to exceed cost for performing a specific technical task that may or may not include parts and materials. For the consulting engineer, a more appropriate and less binding term to convey similar information would be the phrase "opinion of costs."

- Trading: Persuading a contractor to perform extra work (made necessary by an omission or error in the drawings and/or specifications) by allowing him, in return, to omit another specified requirement.
- Gratuitous gesture: Providing a contractor with more information than required implies a voluntary sharing of his problem-solving tasks and may lead to a sharing of potential liability for the contractor's performance. The engineer should focus on his/her own clearly defined tasks during a construction process.
- Unreturned phone calls during a period of attempted problem resolution.
- Inability to collect fees.

### **Action Items for Conflict Management and Mitigation:**

**Action Item 1:** Remain calm. Emotion serves no positive purpose, and actually worsens the situation. When a client or contractor makes an accusation, do not retaliate by countering or attempting to injure the person or organization making the accusation.

**Action Item 2:** DO NOT automatically assume responsibility for the situation, no matter what the facts appear to be at the moment. Once the engineer does this and communicates it to the other parties connected with the loss or potential loss, it is virtually impossible to undo the resulting damage. The habit or practice of accepting blame or responsibility prematurely is so prevalent among well-meaning but uninformed engineers that many other professionals have categorized it as "*The Good Guy Syndrome*."

**Action Item 3:** Communicate. While one should not assume responsibility, neither should one fail to communicate. Avoiding the issue and hoping that it goes away will only cause the situation to worsen. Be alert and gather as much pertinent information as possible. If a personal attorney or a company attorney is involved at this point, carefully adhere to their advice regarding the sharing of information, and keep the attorney informed regarding all new developments.

**Action Item 4:** Notify the personal or company attorney immediately when there are indications that the potential for a claim or litigation might be imminent. DO NOT wait until the situation has progressed to a point that negotiations are impossible and special strategies are useless.

**Action Item 5:** Document and Photograph. When there is evidence pointing to a potential liability claim, immediately gather all project files and make detailed notes of any and all related communications. (See Records are Discoverable in Section 6.) **Never rely on recall.**

**Action Item 6:** Keep seeking alternatives and solutions with guidance from the attorney.

## **Protective Strategies: Dispute Resolution via Legal Processes**

### **Litigation**

Litigation is the act or process of bringing about or contesting a lawsuit utilizing the traditional court system, and is the most widely used method of dispute resolution. There are two reasons for this:

- (1) an individual or company can exercise greater control over litigation than over other forms of dispute resolution, and
- (2) if a form of dispute resolution other than litigation is used, many insurance carriers will waive certain insurance and legal rights.

### **Mediation**

Mediation is a process in which a neutral intermediary agent works with both sides to facilitate communication between the parties in a dispute. The goal is to bring consensus out of dispute.

Mediation can be generally described as a non-binding conciliatory process in which the parties specify the least they will take. Arbitration is often termed as an adversarial process in which the parties ask for the largest sum possible.

### **Arbitration**

Arbitration is the process of resolving disputes between people or groups by referring them to a third party (not a judge), either agreed on by them or provided by law, who subsequently makes a judgment at a hearing.

Many companies do not typically subscribe to arbitration since greater control can be exercised in litigation. However, arbitration may be appropriate in certain circumstances. Advance agreement to arbitration should be avoided.

The arbitration process provides the parties involved with a voice in selecting the arbitrator(s.) The arbitrator is granted significant powers by the parties, and by law and has the right to issue subpoenas, fix the date of hearing, grant postponement, and proceed with the hearing in the absence of a party who fails to appear.

## Section 3      CONCEPTS and THEORIES of LIABILITY

### Two Forms of Liability that Commonly Confront the Consulting Engineer

- 1) Contractual Liability
- 2) Professional Negligence

Two separate theories of liability comprise the legal definition of professional malpractice:

- 1) contractual liability (liability arising out of contract) and
- 2) professional negligence (liability arising out of tort.)

Professional malpractice is an area of legal practice that deals with wrongdoing or negligence by an individual professional or a business. Malpractice causes injury or damage and typically carries connotations of impropriety. Examples are breach of fiduciary duty, fraud, mismanagement, errors in judgment, misconduct, and carelessness.

A **tort** is a private or civil wrongful act, independent of a contract or trust, that results in injury to another's person, property, reputation, or the like, and for which the injured party is entitled to compensation.

The majority of torts are complete, and compensation must be made when there is conduct, causation, fault, and damage.

"Fault" assumes three forms: contractual liability and negligence.

More simply put, in a

1. Existence of a contract (contractual liability)
2. Breach of contract (contractual liability)
3. Damage (property damage, personal injury, or economic loss)

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