

APEGGA Mission

To serve society and protect the public by regulating, enhancing and providing leadership in the practice of the professions of engineering, geology, and geophysics.



This Guideline was prepared by a subcommittee of the Practice Standards Committee whose mandate is "to enhance the quality and value of professional service to the public". Engineers representing both Clients and Consultants participated directly in developing the contents of the Guideline. It was approved for publication by the Council of the Association in April 1989.

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In researching the subject of this Guideline, its authors found a wealth of philosophies and practices on the management of risk in publications by ASFE; the Association of Engineering Firms Practicing in the Geosciences.

Formerly known as the Association of Soil and Foundation Engineers, ASFE is an international association of consulting engineering firms practicing in geotechnical engineering, engineering geology, geohydrology and geoenvironmental engineer. ASFE was established in 1969 in response to a professional liability crisis and is now enjoying one of the lowest professional liability insurance premiums of all consulting engineering firms in the USA.

We appreciate permission by ASFE to extract ideas and practices from their publications and acknowledge their valuable contribution in the development of this guideline.

FOREWORD

Members of APEGGA are required to conform to the Code of Ethics in every respect including the business practices that they use in the conduct of their Professional Practice. They must enter into agreements with fairness and good faith and undertake only those assignments which they are competent to perform by virtue of their training and experience.

Loss prevention through the management of quality has always been a primary element in the management of risk in a Professional Practice. Effective management of quality reduces the cost of funding losses due to errors and omissions and ultimately optimizes cost/benefits to clients.

It is APEGGA's objective in publishing this Guideline to encourage effective management of risk in professional practice so as to minimize the exposure of both the public and the membership to professional liability claims. The Guideline emphasizes loss prevention through the management of quality and, in the event of a dispute arising, effective and efficient resolution of the dispute. It is intended that the Guideline fully reflect the intent of the Engineering, Geological and Geophysical Professions Act, and that it encourage high standards of professional practice.

The suggestions and recommendations made in this Guideline can only be effective if they are in fact adopted and disseminated to both management and staff. It is therefore important that management adopt such portions of the Guideline as are applicable to their individual practice and ensure that the program adopted is implemented and maintained from year to year. This will require at a minimum, periodic dissemination of the program to members of staff, preferably by way of an in-house seminar.

The concepts described in this Guideline represent a standard of practice that all members are encouraged to adopt. Variations in its application can be made to accommodate special circumstances without detracting from its intent. It is not a legal document and is not intended to supersede or replace contractual arrangements designed to satisfy specific situations.

SECTION 1

MANAGEMENT OF RISK

1.1 INTRODUCTION

The Management of Risk in a Professional Practice requires the consideration of many factors which may vary from one Professional Practice to another. The magnitude of the exposure to risk and the method of funding potential damage claims requires careful analysis since the decisions in this area can have very significant consequences; both financial and professional. Some of the primary considerations are:

1. Assessing the relative magnitude of professional liability risk to which the practice is exposed;
2. Making a decision whether or not to fund the exposure to risk and, if so, choosing a suitable vehicle;
3. Implementing and managing a Quality Program to minimize exposure to professional liability risk,
4. Practicing effective dispute resolution methods.

1.2 RISK MANAGEMENT CONSIDERATIONS

The magnitude of risk that a professional is exposed to can be estimated by first identifying the areas of risk and then delineating and quantifying the specific exposure. Assessing the magnitude of risk in a Professional Practice is usually a more complex process than for a single project. It involves the summation of risks associated with a variety of projects and Clients and requires a sometimes subjective analysis of a number of variables.

1.2.1 Risk Identification

Identifying areas of exposure to risk requires analysis of a variety of contributing factors. Characteristics of the Owner, the Professional Practice, the Professional Services Contract, the contractor and the Project are all potential contributors to risk.

1. Characteristics of the Owner

- a) Financial resources: Does the Owner have adequate financing to undertake and complete the project and also have the financial depth to withstand potential increased project costs? Would quality be compromised if projected costs exceed funds originally allocated in the budget?
- b) Professional approach: Does the Owner view the professional as a trusted advisor with authority to carry out the assignment as he best sees fit or will the Owner interfere and thus create an adversarial relationship which may lead to disputes and lawsuits?
- c) Experience: Is the Owner experienced with the type of project and have a corresponding understanding of design and construction?
- d) Attitude on Professional Fees: Does the Owner seek price competition on fees and, if so, what flexibility is available to increase fees for project optimization or extras if conditions warrant?
- e) Quality: Is the Owner interested in a quality project on a life cycle cost basis or is the Owner more interested in rapid project completion and sale?
- f) Expectations: Does the Owner have a clear understanding of his needs and realistic expectations?

2. Characteristics of the Professional Practice

- a) Experience: Has the Professional Practice completed other projects of a similar nature or is this the first one?
- b) Workload: Is qualified manpower available to commit to the project as necessary?
- c) Quality Program: Does the Professional Practice have experience with an appropriate Quality Program to suit the project?
- d) Project Team: Is the team small and integrated or is it large with many disciplines and several subconsultants?

3. Characteristics of the Contract for Professional Services

- a) Terms: Are the terms fair and equitable or are there onerous clauses such as unreasonable hold harmless provisions? does it limit the financial exposure of the Professional Practice for deficiencies in their services?
- b) Performance Guarantees: Are they of the due care and attention nature or more demanding? The professional's obligation is to exercise reasonable care; not to guarantee results or products.
- c) Scope of Services: Is the scope of services, including Review During Construction and field services, well defined but allowing opportunity to change them as the work progresses or is the scope of services poorly defined with emphasis on financial constraints?
- d) Schedule: Does the Owner's schedule impose a stress on the Professional Practice with penalties for later delivery?
- e) Contract type: Is the professional services contract compatible with the construction contract?

4. Characteristics of the Contractor (if already selected)

- a) Experience: Has the Contractor built similar projects in the same geographic area before?
- b) Workload: Will experienced staff be available for the project?
- c) Approach: Has the Contractor displayed a constructive approach to reasonable changes in the past or does the Contractor have a propensity to sue for extras or delays?
- d) Quality: Does the Contractor have a reputation for quality workmanship?
- e) Financing: Does the Contractor have the financial resources to undertake and complete the project?

5. Type of Project

- a) Complexity: Is the project, or any part of it, unique or innovative and does it have complex interfaces?
- b) Logistics: Are the logistics relatively simple or are they complex i.e. due to transportation limitations to remote site locations?

- c) Risk Quantification: If the project is complex, has a thorough risk analysis been completed for the project and are the risks understood and accepted by the Owner? Is the nature of risks well defined?
- d) Site Conditions: Are site and subsurface conditions well defined and if well defined, are conditions generally good or poor?
- e) Environmental concerns: does the project present an environmental or health hazard risk?

1.2.2 Risk Quantification

When the areas of exposure to risk have been identified for a project, the relevant ones should be evaluated and weighted relative to one another to produce a risk factor for the project. This factor can then be examined with respect to the potential for loss on the project. Potential loss typically necessitates consideration of such matters as maximum loss possible, annual loss, and frequency of loss as this pertains to a failure of the project. The propensity to sue by any parties involved represents a potential loss as well, because of the legal and in-house costs by the Professional Practice in defending against damage claims.

By examining a cross-section of typical Owners, Contractors, contracts, project types and staff available for the assignment, the Professional Practice can assess the degree of risk in at least a relative or subjective manner. This will have a direct bearing on considerations with respect to the need to fund that risk and the most appropriate vehicle to do so.

This process of risk quantification serves the purpose of identifying the higher risk projects for purposes of establishing appropriate fee structures. It may also impact on the decision whether or not to provide services to a particular client, project or type of project.

1.3 RISK FUNDING ALTERNATIVES

It is important at the outset of a project to understand what an Owner expects from the project and also to establish the role of the professional as an advisor. It is the Owner's project and the Owner's investment. Therefore, it is the Owner's decision whether or not to accept certain risks on the project, including the decision to use professional services in the first place. It is the responsibility of the professional Practice to advise the owner, to the best of its ability, on the nature of the risks inherent in the project. The limits of risk and responsibility for funding the risk should be clearly stated and understood.

The funding of risk is a complex matter once it gets beyond funding from the assets of the Professional Practice itself. If insurance is selected as the means of funding professional

liability risk, all parties should be aware of its purpose, value and limitations through appropriate consultation.

If it is decided that the degree of risk is such that it should be funded, in whole or in part, there are several funding alternative available. The most common ones are described in the articles following.

1.3.1 Project Funding

On very large projects, the most effective method of funding risk is for the Owner to acquire comprehensive project specific insurance which includes professional liability coverage for all professionals involved. The projects frequently require insurance levels beyond the limits of insurance that an individual Professional Practice is able to acquire. On such projects, the Owner should engage the services of the best qualified Consultants available and negotiate the project insurance premiums to reflect their competence and record of performance.

It is important to consider what happens when the project specific insurance expires. Such project insurance typically covers the design and commissioning period, but it does not extend in perpetuity. If the Professional Practice is separately insured, insurers may extend coverage on the completed project when the project insurance expires. The terms of such extension should be clarified with the insurer.

If project insurance is provided by the Owner, this should be considered in the fee negotiation process. The documentation must be clear with respect of professional liability of the Professional Practice during the life of the project. This arrangement should be reflected in the records of the Professional Practice and be recognized by its insurers in assessing annual insurance premiums.

If the Owner elects to provide project insurance for a Professional Practice, the contract between the Professional Practice and the Owner should contain a clear and comprehensive specification for the insurance. Additionally, the Professional Practice should obtain a copy of the policy and any renewals for its own records.

In that most Professional Practices cannot bear or be expected to bear the risk of a major loss on a large project, their contract with the Owner should limit the liability to the collectible amount of project insurance.

1.3.2 Going Bare

A Professional Practice should decide whether or not the exposure to professional liability risk requires separate funding. A practice with very low exposure to risk may elect to "go bare" wherein the assets of the Professional Practice, in essence, fund the professional liability exposure.

Before electing to "go bare", legal advice should be obtained with respect to the exposure of the Professional Practice including its partners, officers, professional employees, Clients and the public. Furthermore, such a decision should only be considered in concert with the adoption of an effective management of quality program and the concurrence of current and future Clients.

Professional members of APEGGA who offer their services to Clients on a short term "contract employee" basis should consider the responsibility for funding professional liability risk in negotiating their remuneration package. If the Client assumes that responsibility, it should be recorded in writing. In circumstances where the employer of professional members, who are either "contract employees" or full time employees does not assume responsibility for funding professional liability risk, the members should consider their position and take appropriate action to deal with that exposure.

1.3.3 Funding The Professional Practice

Methods of funding professional liability risk can take different forms such as a special fund set up by the Professional Practice, captive insurance and commercial insurance. This latter type of insurance is acquired to insure the Professional Practice from a loss or losses and is not intended to insure projects per se.

1. Internal Funding

A Professional Practice can establish its own funding of professional liability risk by creating a separate fund for that purpose. This type of funding requires careful management of the fund and the Professional Practice.

2. Captive Insurance

A group of Professional Practices can establish a captive insurance fund. In one such case, the individual practices own the insurance company and are obligated to maintain high standards or practice with regular external audit by their peers. The provinces of British Columbia, Ontario and New Brunswick have passed legislation which permits captive insurance companies. However, no tax advantage is obtained through this provincial legislation and off-shore captives still have some advantage in that area.

3. Commercial Insurance

The most common type of risk funding in Alberta is the purchase of professional liability insurance in the commercial market. Some typical features of this type of insurance are described below;

- a) The insurance coverage is on a claims made basis. That is, the insurance does not cover a particular project in perpetuity. Rather, the projects being worked on are covered only if claim is made against

the policy during that year, and then only if claim is made against the policy during that year. A Professional Practice insured at the start of a project does not mean that it will have that insurance in place one or two years hence. The Professional Practice cannot ever be certain of maintaining a given level of insurance into the future because it may not be available in the market place.

- b) There is a maximum limit to the policy which may or may not be adequate to cover all of the loss. In that case, the assets of the Professional Practice and its principals and employees are exposed.
- c) There is usually a maximum annual limit that will be accepted in a policy year. That is, once the claims are not eligible for coverage.
- d) Insurance policies usually require that the insurance company be contacted at the first signs of a potential problem. This enables the insurer to assign an in-house or independent adjuster to assess and attempt to settle the problem without involvement of the legal profession.
- e) When some members of a project team are not insured, the exposure of those who are insured increases. The additional exposure is due to the "deep pocket" syndrome.
- f) There are typically exclusions to insurance coverage and it may not be readily apparent whether or not there is coverage in a particular situation.
- g) The mere existence of professional liability insurance tends to attract litigation as a dispute resolution process. Alternate techniques to litigation are, however, available and in some situations, are commonly and effectively used.
- h) Some insurance policies require that the Professional Practice absorb legal and investigation costs up to the limit of the deductible in the event of a dispute. Other policies require that legal and investigation costs be deducted from the limits of liability under the policy. In either case, it is important for the Professional Practice to assess its ability to absorb these legal and investigation costs as they are sometimes the most significant cost item involved in a claim.

4. Blend of Internal Funding and Insurance

Exposure to risk can be funded by a combination of internal funding and high deductible insurance purchased from the commercial market to cover major claims.

Such a decision required consideration of the effectiveness of the Quality Program in the Professional Practice and its potential to prevent a major claim. It also requires consideration of the financial capacity of the Professional Practice to withstand the cost of damages that could result from the exposure.

1.3.4 Business Considerations

It is not possible to completely shield a Professional Practice from potential assessments of cost for damages to second or third parties. It should be anticipated that claims for damages will occur some time in the corporate life of any Professional Practice, recognizing that the claim may not arise necessarily through error or omission, but through the vagaries of Clients, contractors, third parties and the legal system.

SECTION 2

LOSS PREVENTION THROUGH MANAGEMENT OF QUALITY

2.1 INTRODUCTION

Effective control of damage claims in a Professional Practice requires a Quality Program involving organizational, operational and public relations considerations. Such a program will have a significant impact on the long range cost/benefit that flow from a client/professional relationship.

To be effective, the elements of a quality Program must be evident by the manner in which the Professional Practice organizes, selects staff and executes assignments. This evidence should be the basis on which assessments are made with respect to the relative magnitude of the risk of the professional liability exposure and the appropriate method for funding the risk.

2.2 ELEMENTS OF A PROGRAM FOR MANAGING QUALITY

An effective program for managing quality will have a positive influence on the attitude of the staff in a Professional Practice and the procedures they use in the execution of assignments. Its many elements in both professional and business practices will improve the quality of professional services and reduce the probability of deficiencies. Such a program will reward both Client and professional through improved quality of professional service, reduced exposure to risk and long range cost/benefits to both.

2.2.1 Organizational Considerations

1. Objectives of the Professional Practice

The long range success of a Professional Practice can be significantly enhanced by the adoption of a statement of purpose with complementary objectives and goals. To be effective, such statements must have the support of those employees who have potential to influence their achievement. These statements will, of necessity, restrict the scope of practice to areas of competence and become the central focus for motivating staff and planning business development activities.

Some important activities in this area are:

- a) Establish the scope of service to be provided by the Professional Practice including the market sector and geographic area to be served.
- b) Develop long range growth and financial objectives with a commitment to review periodically for their appropriateness.
- c) Establish a culture in the Professional Practice which emphasizes a sense of responsibility to employees, Clients and the public.

2. Organizational Structure

A clearly defined organizational structure is essential for efficient communication and control in a Professional Practice.

Some important requirements are:

- a) an appropriate organizational chart showing key position responsibilities and interrelationships should be distributed and explained to the staff.
- b) Authority to make various types of operational decisions should be clearly establish and known by all staff.
- c) Special organizational arrangements to execute specific types of projects should be adopted. Staff should be made aware of the significance and reasons for the alternative organizational arrangements; i.e. projects executed on a task force basis by staff assigned full time to the project versus projects executed by drawings from personnel in various technical departments as required.

3. Office Environment and Technical Resources

The work environment and technical support available in a Professional Practice has a direct influence on its efficiency and also on its ability to offer quality professional services. The working conditions, physical facilities and technical resources all contribute to the credibility of the firm.

Some key considerations in this area are:

- a) The working environment should be professional, comfortable, convenient, functional and orderly. It should leave an impression of competence and trustworthiness.

- b) Key technical resources should be available in-house.

4. Supervision

The amount and type of supervision will vary with the size and complexity of a project and the qualifications, experience and performance record of the persons assigned to it. To be effective, a project team must be formally organized with checking procedures that complement the planned supervision of the work.

Established policies for supervising work as it is being executed should reflect the standards of quality adopted by a Professional Practice. The documentation and checking procedures should be evident and available for review by Clients.

Some recommended practices with respect to supervision during the execution of a project are:

- a) At the commencement of a project, name the positions and/or persons responsible for specific decisions and establish clear limits of authority with respect to both business and technical matters.
- b) Adopt formal procedures for review and documentation during the various stages of a project.

5. Risk Manager

The responsibility for implementing and monitoring risk management and quality control procedures in a Professional Practice must be formally assigned to a senior member of the Professional Practice. His job description should include the identification and funding of risk, development and implementation of quality control procedures and the effective resolution of disputes when they do arise. The person to whom these responsibilities are assigned will determine the effectiveness and success of the recommendations contained in this Guideline.

2.2.2 Operational Considerations

1. Professional and Technical Staff

The professional staff in a Professional Practice must be qualified technically to perform the services offered by the firm. Staff training and recruiting should complement quality and growth objectives.

Some key policies are:

- a) The identification of areas of practice in which in-house professional and technical staff are fully qualified and those which require specialist advice from outside.
- b) The adoption of a staff development program designed to achieve the balance of manpower capacity, technical skills and experience to complement the purpose and objectives of the Professional Practice.
- c) The development of a culture within the Professional Practice that encourages staff to be frank and open regarding their competence. Any limitations in capability or capacity should be dealt with directly and confidently with solutions that do not detract from the credibility and integrity of the Professional Practice.
- d) The encouragement of project staff to seek specialized advice from other staff in the Professional Practice or from outside the practice, if required.

2. Professional Development

A consistently successful Professional Practice requires a dynamic professional development program. Such a program goes beyond technical knowledge and project execution skills; it recognizes characteristics such as integrity, ethics and reliability that are associated with professional responsibility.

Some Important policies in this area are:

- a) The encouragement of all professional and technical staff to maintain technical competence in all areas in which professional services are offered and undertake assignments accordingly.
- b) The adoption of standards of professional practice that reflect the Engineer, Geological and Geophysical Professions Act and practice Guidelines published by APEGGA.
- c) The encouragement of professional staff to attend professional development seminars and participate in the activities and programs of their Professional Association.

3. Employee Advancement

The advancement of qualified staff in a Professional Practice to positions of greater responsibility contributes to unity and pride. The policies in this area should consider the importance of technical competence, varied experience

and track record in the area of practice in which professional services are offered.

Some important policies are:

- a) The promotion of staff from within the Professional Practice except where the needs of the practice in experience, skill or knowledge cannot be met by current staff.
- b) The adoption of an effective performance evaluation procedure which records the strengths and deficiencies of the staff.
- c) The communication of employee advancement policies of the Professional Practice to current and prospective employees.

4. Assigning Personnel to Projects

The overriding consideration in assigning professional and technical personnel to a project must be based on their qualifications and ability to satisfy the needs of the project. The practices in this area should clearly complement the standards of quality and image that the Professional Practice intends to project.

Some important policies in this area are:

- a) The assignment of experienced personnel with a known performance record to all key management and technical supervisory positions on the project in accordance with commitments to the Client when the assignment was undertaken.
- b) The development of effective procedures for unavoidable changes in key personnel during the execution of a project. Other staff changes should be kept to a minimum and should never result in a reduction in the qualifications and overall competence of the project team.
- c) The assignment of personnel to project, taking into account the on-going program for professional development and on-the-job training in the Professional Practice.

5. Documentation

Appropriate procedures and forms for documenting all key activities on a project are essential for quality control. Policies and procedures should be available describing their distribution and the level of documentation required for initiating, recording and controlling projects.

Some recommended practices in this area are:

- a) Document the basis on which an assignment is undertaken in writing, preferably signed by both the Professional Practice and the Client. It should include, as a minimum, the scope of services, schedule and fees.
- b) Adopt procedures and forms for documenting all activities essential for quality control during the execution of the project, including practices required by the authorities.
- c) Inform the Client in writing the consequences of overruling or deviating from specific professional advice on a project.
- d) Adopt formal procedures for retiring, storing and/or purging project files.
- e) Perform an audit of a completed project to identify the cause of specific problems. It is a means of learning through experience how to avoid claims as well as how to effectively deal with them when they do arise. The audit results should be recorded and distributed to appropriate staff.

2.2.3 Public Relations Considerations

1. Advertising

Professional advertising should avoid exaggeration and/or misrepresentation of the capabilities of a Professional Practice. The relationship of the with Clients is enhanced when the information provided to the public is factual with respect to qualifications and scope of services offered.

Some recommended policies in this area are:

- a) The development of brochures and promotional literature which accurately describes the scope of services offered by the Professional Practice and the qualifications and experience of its personnel.
- b) The use of professional advertising which is done in a dignified and professional manner and in accordance with the APEGGA Guideline on "Professional Advertising".

2. Client Relations

The relationship between a Professional Practice and its Client must be based on trust. The achievement of this type of relationship usually produces

optimum cost/benefits to the Client and repeat assignments which are relatively free of conflict.

Some recommended policies in this area are:

- a) The adoption of procedures for scheduling and budgeting which illustrate an effective project management system. They should keep both the Project Manager and the Client fully informed of the progress and expenditures on the project.
- b) The adoption of an effective communication plan for a project including periodic personal contact at levels above those directly involved with the day to day execution of the project.
- c) The establishment of procedures for maintaining confidentiality of specific Client information or design aspects of a project, if required.
- d) The adoption of business-like procedures for the submission of invoices for professional services and for dealing with outstanding accounts.

3. Avoiding Unnecessary Conflict

A quality management program in a Professional Practice is effective, not only in reducing errors and omissions, but also in avoiding misunderstandings which may result in damage claims. Effective communication and documentation procedures between a Project Manager, his Client and other parties involved in the project are important elements in any loss prevention program.

Some important policies in this area are:

- a) The adoption of a format for proposals which clearly presents the scope of services to be provided and any limitations that may affect the Client.
- b) The adoption of a writing style and language in proposals, reports and other documentation forms that will provide understanding of the risks and uncertainties of the project.
- c) The development of an awareness of risk in the Professional Practice and an objective manner of dealing with it.

SECTION 3

DISPUTE RESOLUTION

3.1 INTRODUCTION

The loss prevention through management of quality techniques outlined in Section 2 of the Guideline are designed to avoid disputes. At the first sign of a potential dispute, it follows that all parties involved should make a concerted effort to deal with the matter through consultation with each other. Disputes which do inevitably arise however, should be dealt with in an objective and cost effective manner. The Professional Practice should be familiar with the options available for dispute resolution and be aware of the potential to control their cost.

Disputes are usually resolved using one of five recognized procedures: negotiation, conciliation, mediation, arbitration, or litigation. The more polarized and resistant the parties are in the dispute, the higher the level of dispute resolution procedure normally required. The cost/benefits and impact on the client/professional relationship usually deteriorate progressively as the formality of dispute resolution escalates from negotiation to litigation.

3.2 LOSS CONTROL IN EVENT OF DISPUTE

The first step in dispute resolution is to recognize that a dispute is developing and to identify the sources and cause of disagreement. This should be followed by an analysis of the facts to form the basis on which consultation and rational decisions can be made so that the cost of resolution can be kept to a minimum.

3.2.1 Recognizing the Dispute

Some of the common sources of disputes are changes in conditions, error in documents prepared by the professional, failures, complaints by the Client or Contractor, demands for free services, complaints on fees, financial problems by the Owner or Contractor and strained relationships between the Client and the Professional Practice. Early recognition of the sources of a dispute is most important in controlling the cost of dispute resolution and also in containing the negative impacts on the relationships between the Professional Practice and other parties on the project.

3.2.2 Early Reporting

As soon as a dispute is identified, it should be reported to the risk manager or other responsible person in the Professional Practice. A formal procedure for reporting disputes and potential disputes should be adopted by the Professional Practice.

3.2.3 Documentation Review

Disputes are often resolved on the basis of what is contained in the documents. It is therefore important to identify the relevant documents as soon as possible and to assemble these in an orderly manner for review and summary.

3.2.4 Witnesses

Some disputes may not be resolved for some time after they first arise. By that time, memories will have faded and in some instances, key employees may have moved on. Because the observations and statements made by witnesses are so very important, the Professional Practice should adopt a policy of recording witness statements from employees involved directly in the matter in dispute.

3.2.5 Photographic Evidence

Photographic evidence can be very valuable in the eventual resolution of a dispute, particularly where physical evidence is not likely to be available to a third party mediator, arbitrator or judge. Therefore, when a dispute arises, photographic evidence should be obtained and appropriately recorded.

3.2.6 Strategic Considerations

An open and objective attitude toward the subject of the disagreement and the parties involved helps to create an environment for resolution of a dispute through reasonable compromise. Appropriate emphasis on integrity and fairness will also help to keep lines of communication open and may avoid the development of hard positions.

In preparing for the first formal meeting to discuss the matter in dispute, the Professional Practice should assemble all necessary documentation and summarize alternate solutions in order of feasibility. Such a summary should include the strengths and weaknesses in the positions of each of the parties involved and be used to objectively seek an opportunity to resolve the dispute through discussion and reasonable compromise.

3.3 METHODS OF RESOLVING DISPUTES

Five common methods for resolving disputes are described below:

1. Negotiation — is the communication process between two parties in an attempt to reach agreement and settlement on a matter in dispute.
2. Conciliation — is a process agreed to by the disputing parties in which a third party acts as a facilitator in an attempt to resolve the dispute.
3. Mediation — is a voluntary process for settling disputes in which a neutral third party assists the disputing parties in reaching a mutually beneficial settlement.
4. Arbitration — is a voluntary process for resolving disputes, adopted by agreement of the disputing parties either before or after a dispute has arisen. The parties in dispute refer their disagreement to a mutually acceptable, knowledgeable, independent arbitrator having agreed in advance to be bound by the arbitrator's decision. The arbitrator may be one person, or three, as agreed to by the disputing parties. The arbitration process is described in The Alberta Arbitration Act.
5. Litigation — is a legal proceeding conducted in accordance with rules of the judicial system in which the presiding judge makes a decision on the matter in dispute based on the evidence and information provided by both disputing parties.

3.4 DISPUTE RESOLUTION PROCEDURES

3.4.1 Negotiation

- a) Adopt a problem solving approach where the situation and background to the dispute are documented and fully understood.
- b) Identify the problem or dispute with the concurrence of the other disputant.
- c) Outline all possible solutions that could resolve the dispute and note the implications of each.
- d) Discuss the advantages and disadvantages of the potential solutions with the objective of accepting the one that is the most acceptable to both.

3.4.2 Conciliation

The disputing parties mutually agree to conciliation.

The disputants select a mutually acceptable facilitator.

The facilitator actively participates in a decision making process and the agreement reached may or may not be binding.

3.4.3 Mediation

The disputing parties agree to mediation.

The disputants select a mutually acceptable mediator.

The mediator discusses, questions, and comments without taking sides. The objective is to lead both sides to a mutually acceptable solution and to which both parties are committed. If agreement is not achieved, the parties are free to use other dispute resolution procedures.

The advantages of mediation are:

- a) speed — disputes can be resolved relatively quickly as only the disputants and the mediator are involved.
- b) privacy — unless the parties agree otherwise, proceedings are conducted in private.
- c) choice of mediator — unlike the judicial process, the parties can choose their own mediator. This individual can be chosen on the basis of his/her expertise and knowledge of the subject in dispute.
- d) costs — disputes can be resolved with minimal expenditure in time and money. Costs are normally considerably less than either arbitration or litigation.

3.4.4 Arbitration

Arbitration may be initiated by mutual agreement of the parties in dispute or it may be a requirement of a contract between the disputants.

The disputing parties select a mutually acceptable arbitrator. Alternatively, each of the parties to the dispute may name an arbitrator to act on a panel of arbitrators, and the named arbitrators will appoint a third arbitrator to act as Chairman.

The arbitrator is a lay person, not a judge. When the issues of the dispute are highly technical, an arbitrator with recognized qualifications in that area is normally selected. The arbitration process may vary in formality from one case to another but must be conducted in a manner that satisfies the rules of natural justice and the requirements of The Alberta Arbitration Act.

Advantages of arbitration are:

- a) Time — provided the parties have agreed on a procedure and there are a limited number of issues and parties involved, a dispute can usually be resolved more quickly by arbitration than litigation.
- b) Settlement — the arbitration process is conducive to early settlement, as opposed to court proceedings which tend to discourage early settlement negotiations.
- c) Convenience — without the constraint of court schedules and facilities, the parties are free to locate hearings having regard for the nature of the dispute and location of witnesses and principals.
- d) Cost — typically, the fees of an arbitrator and associated costs will be less than in court proceedings.
- e) Arbitrator Qualifications — the parties are free to select an arbitrator, either because they have confidence in his judgement and impartiality or because he has expert and specialized knowledge in the area of the dispute.
- f) Procedure — the somewhat informal process tends to promote goodwill such that long term business relationships can continue after resolution of the dispute.
- g) Award — it is generally final and binding and in many cases, the relationship between the parties continues in a relatively uninterrupted manner.
- h) Privacy — some dispute have potential to embarrass the parties involved and the private nature of arbitration is therefore advantageous.
- i) Non-adversarial — when the parties themselves advocate their own case in arbitration, the lawyer's role in such circumstances is advisory, rather than adversarial as in court.
- j) Decision — courts are bound by rules of law, whereas an arbitration award may more fully reflect local standards of behaviour and conduct and thus achieve a more just result.

For any arbitration to be successful, it is most important that the parties agree in advance on the rules and procedures to be followed during the course of the arbitration. If they are not agreed in advance, control of the process can be lost resulting in additional cost and, in some instances, a total breakdown of the arbitration. Further information can be obtained from the Arbitration and Mediation Society of Alberta.

3.4.5 Litigation

Resolution of a dispute through litigation is initiated with the filing into court of a Statement of Claim. Within a prescribed time, a Statement of Defence must be filed.

In preparation for an examination of the evidence, the parties to the dispute are required to provide a listing of documents and a copy of the documents, upon which the dispute is to be argued. This requires a complete and accurate summary of all related documents, usually filed sequentially as to date and subject complete with index.

An Examination for Discovery is held at which legal counsel for each of the parties to the dispute questions the other party and their witnesses. Questions and answers are usually transcribed.

After the Examination for Discovery, both sides assess their relative positions in the dispute. Negotiated settlement continues throughout this process up until a decision is made by the court.

If a negotiated settlement is not achieved during Examination for Discovery, the dispute proceeds to litigation and a date is set for trial. At the trial, both sides present their respective positions and arguments to a judge. The judge hears the evidence and hands down a Decision.

The advantages of litigation are:

- a) It is a thorough process argued by legal counsel for both parties which may be particularly appropriate for very large claims and complex disputes.
- b) The decision is binding as provided by law.
- c) The decision is definitive and does not tend toward middle ground as may be the tendency with other forms of dispute resolution.
- d) Choosing litigation at the outset avoids the risk of having an arbitrator's decision overturned by the courts due to a procedural error.
- e) The ability to involve third parties is an advantage which is not available in the case of arbitration. Only the parties to the contract in which the arbitration clause is contained can be compelled to testify in an arbitration.
- f) The availability of a formal appeal process.

3.5 MANAGEMENT INVOLVEMENT

Whatever method of dispute resolution is chosen, it is important for the Professional Practice to involve senior management from the outset of the process. One of the surest ways to fail to resolve a dispute, is to leave management of the actual dispute to those who were involved in creating the problem in the first place. Their natural lack of objectivity can lead to hard and fast positions which tend to discourage rather than encourage early resolution of the disagreement. Involvement of a senior officer of the Professional Practice enables a more objective view to be taken and facilitates the decision making process when the opportunity for resolution arises.

DEFINITIONS

1. OWNER

The person, company or other entity who owns the property under consideration and has the authority of ownership.

2. CLIENT

The Owner or Agent of the Owner who establishes the needs that are to be met by the Professional.

3. CONTRACTOR

The person, company or other entity who contract to carry out the intent of the construction drawings and documents for a project.

4. PROFESSIONAL PRACTICE

The individual or entity authorized to offer professional services in engineering, geology or geophysics in accordance with the Engineering, Geological and Geophysical Professional Act.

5. QUALITY PROGRAM

A comprehensive plan for the elimination of practices and conditions which detract from the production of high quality goods or services.

CLIENT/PRIME CONSULTANT/ SUBCONSULTANT AGREEMENTS

Standard forms of agreement are available from a number of sources including The Association of Consulting Engineers of Canada. Many Clients who deal with Consultants on a regular basis have also developed their own standard forms which reflect their particular needs. consultants and Clients using these standard forms should ensure that all of the elements of the agreement outlined in the attached format are included.

Each assignment must be considered for its own special requirement. Not only must the identified risks mentioned in Section 1 of the Guideline be taken into account by the contract, but the contract must also be compatible with the general needs of the project and the other contract forms chosen.

Further information can be obtained from the APEGGA Guideline, "Engagement and Payment of Consultants and Subconsultants".

CLIENT/PRIME CONSULTANT OR PRIME CONSULTANT/SUBCONSULTANT AGREEMENT

THIS AGREEMENT made this _____ day of _____ 19 _____.

BY AND BETWEEN

_____ Client

and

_____ Consultant

WHEREAS the Client intends to engage the services of the consultant in connection with the provision of _____ services for the _____ *name of project* project.

NOW THEREFORE THIS AGREEMENT WITNESSES that the parties hereby agree as follows:

[Note: If space provided under each of the articles is inadequate, indicate by notation that numbered schedules are attached as appendices.]

ARTICLE I

SCOPE OF SERVICES

1.01 Professional Services

_____ *Concise but comprehensive description of services to be provided.*

1.02 Supplementary Services

_____ *Concise but comprehensive description of support services and sub-contracts.*

ARTICLE II

SCHEDULE

Work will commence no later than _____ 19 _____ and the services described in article I will be performed in accordance with the following schedule.

Concise description of the schedule including dates of significant stages of the work

ARTICLE III

CLIENT RESPONSIBILITIES

3.01 Information

The Client shall provide the Consultant with a written description of the project and provide all background plans, reports and records that will be required to complete the Consulting Services.

3.02 Authority

The Client shall provide the Consultant with the authority to act as his agent, to gain entrance to property or to seek information from government and other authorities as required in the performance of the Consulting Services

3.03 Other

Describe specific items.

ARTICLE IV

CONSULTANT RESPONSIBILITIES

4.01 Work Schedule

Describe the schedule for the main elements of the assignment.

4.02 Progress Reports

Describe scope and frequency.

4.03 Cost Estimate

Define the type and quality of estimate to be provided and any specific limitations in schedule or quality.

4.04 Other

Describe specific items.

ARTICLE V

FEE BASIS

5.01 Professional Services

The Client agrees to compensate the Consultant on the following basis:

Concise description on fee or hourly rates including any targets or lump sum limits

5.02 Disbursements

The Client agrees to reimburse the Consultant for disbursements as described below:

Concise description including mark-ups if applicable and rate for equipment or vehicles as applicable

5.03 Additional Services

Concise description of basis of fee or hourly rates.

ARTICLE VI

PAYMENT

Invoices including documentation for professional services and disbursements will be submitted to the Client by the Consultant at the end of each month. Invoices are due and payable on receipt by the Client and are overdue days later.

Describe documentation including format and interest on overdue accounts if applicable.

ARTICLE VII

TERMINATION OF AGREEMENT

7.01 By Client

Concise description of circumstances and procedures including responsibility and payment

7.02 By Consultant

Concise description of circumstances and procedures including responsibility and payment

ARTICLE VIII

OWNERSHIP OF DOCUMENTS

Describe ownership of originals and schedule for transmittal in relation to completion of the assignment

ARTICLE IX

INSURANCE

Detailed description of insurance coverage to be provided.

ARTICLE X

CONFIDENTIALITY

Describe the specific undertaking, if any, to maintain confidentiality of information associated with the assignment.

ARTICLE XI

OTHER

Describe specific items such as special requirements for Arbitration.

ARTICLE XII

GOVERNING LAW

This Agreement shall be governed by the laws of _____.

IN WITNESS WHEREOF the parties hereto have executed this Agreement all as of the day and year first above written.

[Client]

Per: _____

Per: _____

[Consultant]

Per: _____

Per: _____