HOW DO WE MANAGE ENVIRONMENTAL RISK?

Everything we do, as individuals or as mining companies, results in some level of environmental impact. Clearly, those who best understand the impacts and base their actions on that understanding, will maximize their success with the public, regulatory, financial, and other communities with which they deal. Pincock Allen & Holt (PAH) can help. PAH provides consulting services for design and implementation of comprehensive Environmental Risk Management (ERM) systems that enable a company to: 1) identify the nature of environmental risks created by its operations; and 2) configure its organization to appropriately manage those risks. The system also creates a framework for communication of positive performance to the company’s relevant stakeholders.

PAH’s extensive experience providing diverse consulting services to the mining industry since 1968 allows it to develop an ERM system that is consistent with all aspects of a mining company’s business and can be fully integrated into its existing operations. The ERM system is tailored to address a range of corporate environmental needs, including regulatory compliance, government and community relations, securities disclosures, and other important business relationships.

In the discussion that follows, PAH recommends an approach for development and implementation of a complete ERM system. Obviously, companies with programs already in place may not require the full range of services. Accordingly, PAH can provide support only where necessary to complete or complement a company’s existing systems. PAH will be pleased to meet with management representatives to develop a scope of services tailored to their company’s specific needs.

SYSTEM DEVELOPMENT

As part of this collaborative process, PAH develops this ERM system by asking some important questions:

1) How much risk is company management willing to accept?
2) What actions are required to meet that level of risk?
3) How is program success measured?
4) How will appropriate information be communicated to relevant stakeholders?

Understanding Program Needs

Interviewing Management

Any ERM program must be consistent with the company’s operating style, environmental protection philosophy, and information disclosure practices. To ensure this consistency, PAH interviews senior and line management regarding environmental conditions, regulatory settings or constraints, operating structures, staff availability, financial resources, and general environmental protection commitments. Information gained in these interviews forms the basis for a management system that builds on the company’s strengths and maximizes the ease with which new programs are assimilated.

Reviewing Permits

PAH reviews all operating permits and property access documents to determine the nature of the company’s environmental protection requirements. This review will be conducted jointly with the company personnel who have the best understanding of company records and a broad command of the regulatory conditions under
which its operations are conducted. It is recommended that this information be developed at the direction of corporate legal counsel to maximize protection under attorney/client privilege.

- **Assessing Compliance**

Once the company’s risk management objectives are defined, PAH conducts an assessment of the extent to which current operations are consistent with them. This assessment incorporates existing information and, if necessary, includes an independent review of operations to identify any previously undocumented compliance issues. Again, it is recommended this information be developed at the direction of corporate legal counsel to ensure maximum protection under attorney/client privilege.

- **Evaluating Exposures**

Details related to individual compliance issues are evaluated by PAH to determine environmental impacts and regulatory consequences. This information forms the basis for recommendations regarding action prioritization under the ERM plan.

### Developing Appropriate Policy

The most effective way to ensure adequate communication of the company’s philosophy related to environmental protection is to have a clearly stated environmental policy in a form appropriate for distribution to employees, regulators, shareholders and community representatives. PAH works with company management to develop such a policy statement, or statements, consistent with the company’s overall management objectives.

- **Drafting Policy**

The importance of an environmental policy is not only to solidify and communicate a company’s philosophy relative to addressing environmental issues, but also to provide the administrative framework within which environmental decision-making and resulting action is authorized. The policy must clearly establish the priority of environmental considerations relative to other primary business parameters, identify the general structure and responsibility for implementing programs, and document the company’s commitment to fulfilling the policy’s intent.

- **Importance and Authority**

PAH works with company management to draft a statement of environmental policy that clearly establishes the importance of environmental performance by coupling it with the company’s other business parameters or value drivers. The policy also expresses the company’s commitment to its environmental responsibilities and establishes the authority for fulfillment of that commitment.

- **Responsibility**

The responsibility for carrying out the intent of the environmental policy will be clearly identified in the policy. Final policy language is designed to allow inclusion of environmental practice in the company’s personnel performance evaluation system.

- **Commitment to Compliance**

One important element of an effective environmental policy is an unambiguous commitment to apply it to all company operations, regardless of location. A requirement that all primary contractors conduct company work in accordance with the policy is also advisable. PAH aids company management in drafting policy language that clearly communicates the company’s environmental intent.

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### Communicating Policy

The environmental policy should be short and to the point. It should be clearly stated in a form suitable for distribution to employees, shareholders, investors, business associates, and the public at large. If a formal policy must be designed in a format consistent with other internal documents, and which is not suitable for publication, a separate statement of policy intended for broad distribution may be advisable.

### Mitigating Existing Risks

As part of the process of understanding specific environmental risks, PAH identifies the exposures the company’s operations have created or may create. These exposures will be reviewed by the company’s management and evaluated to determine the need for actions to appropriately manage them.
AN INTEGRAL PART OF SOUND BUSINESS PLANNING

■ Developing Action Plans

For environmental issues or exposures requiring attention, PAH prepares detailed plans of action for management review. These plans include a summary of conditions, assessment of technical alternatives, discussion of available resources, evaluation of relation to other functions, presentation of mitigation scopes of work, and statement of program goals.

■ Establishing Activity and Cost Schedules

Once mitigation scopes of work are complete, PAH develops schedules, budgets, authorities, responsibilities and resource requirements. These schedules are prepared in a form that allows performance tracking and goal measurement.

SUCCESSFUL PROGRAM IMPLEMENTATION

Integrating Programs into Current Operations

To be most effective, actions resulting from implementation of an environmental policy should be fully integrated into the company’s operating organization.

■ Defining Responsibilities

Integration of environmental actions into day-to-day operations is the most direct way to ensure acceptance of responsibility for fulfillment of the company’s commitment to performance. Acceptable environmental performance should not be imposed on operations as a corporate directive, but assumed by employees and management at all levels of a company as a normal operating responsibility. All action plans prepared by PAH are designed to be supportive of this basic tenant.

■ Recognizing Synergies

It is also important that individual environmental programs be designed with the specific goal of identifying synergies between environmental actions and existing operations. The potential for shared use of equipment and personnel within existing operations and schedules is significant and results in minimum costs and maximum effectiveness.

The ERM system designed by PAH creates a framework within which planning related to community interaction and land use planning (before, during, and after operations) can take place. For example, identifying ways in which communities near an operation can recognize value in addition to hourly employment can be helpful to project development, operation and closure. Positive community support can expedite project permitting, add stability to available labor resources, and encourage shared responsibility for site management following termination of mine operations.

Auditing Environmental Performance

Once environmental protection programs are in place, a procedure for assuring their continual effectiveness is necessary. PAH develops this procedure in a form designed to recognize and measure performance success, identify additional action requirements, communicate program revisions, accomplish employee training, and heighten issue awareness.

■ Developing Audit Program

While audits of environmental programs by an independent consultant may be appropriate from time to time, primary reviews should be accomplished using company employees. Accordingly, PAH designs an audit program that uses personnel from a broad cross-section of the company. The audits will be regularly scheduled, with frequency dependent on operating dynamics. Site and program audits follow a strictly defined protocol that produces documents that can be used for communication directly to company management. Auditing within a strict protocol helps to maintain technical consistency, facilitates performance comparison, minimizes participant inconvenience and maximizes ease of report preparation. It is recommended that any audit programs be reviewed and approved by company legal counsel and implemented in a manner that secures attorney/client privilege.

■ Implementing Audit Process

Once an audit protocol is in place, an initial environmental program review should be conducted
to establish a data baseline. Subsequent audits will be conducted on a scheduled basis, either as a company-wide exercise or separately for individual operating areas or units. The form of subsequent audits can become less comprehensive over time as environmental program adequacy is demonstrated. The process for selecting members of audit teams is established by PAH as part of the audit program protocol. A primary advantage of using company personnel on audit teams, and varying the specific make-up from audit to audit, is the training of key personnel that results from the exposure to the process. Basic rules of confidentiality, cooperative problem solving, and non-participation by personnel directly connected to the audited activity, will also be clearly set out in the audit protocol.

### Protecting Audit Results

It is imperative that the results of environmental audits be considered confidential and protected to the maximum extent possible. Conducting the audits at the direction of company legal counsel may provide the ability for information gathering under attorney/client privilege. Other administrative issues important for information protection, such as specific guidelines for information maintenance and retention, will also be defined.

### Reporting Program Results

The purpose of a program to audit environmental program performance is to gain the information necessary to manage risks by identifying material issues and ensuring that programs responsive to them are in place. Informing company management regarding the effectiveness of those programs is best accomplished via a standard, and regularly scheduled, reporting system. It is this same reporting system that provides environmental information necessary for inclusion in public disclosures, consideration in financial planning, and documentation to meet Joint Venture, lease agreement, or other business relationship requirements.

### Integrating with Existing Reporting Programs

PAH believes that communications regarding environmental program performance should be incorporated into existing management reporting systems. This is consistent with integrating environmental programming into the company’s operating structure and minimizes the extent to which management and others are required to add new information systems to their existing review responsibilities.

### Establishing Reporting Formats and Schedules

Reporting formats and schedules developed by PAH are consistent with, and extensions of, existing reporting systems. This inclusion in existing systems encourages acceptance of responsibility for environmental programs and is consistent with policy statements related to program priority.

### Incorporating Continuous Improvement

Clearly, any program that assesses technical performance must be reviewed periodically to make sure it effectively recognizes changing conditions and company positions. Consequently, the total ERM program developed by PAH includes a mechanism for protocol review and revision as necessary to maintain maximum compliance with company policy.