

Case Study

Thiess Environmental Management System

Introduction

Thiess is a multidisciplinary company which provides engineering services to a diverse range of industries. A core part of its business is providing contract mining services. Through services to clients, it is one of the largest coal producers in Australia. Thiess does not own any mines but operates facilities on behalf of clients in Australia, Indonesia and Peru. Across twenty projects, services range from extensive responsibility for the mine planning and operations, including rehabilitation to provision of equipment on site under the client's direction.

The project-focus of the company means that Thiess often needs to respond quickly in setting up a new operation. The approach the company takes needs to be flexible to meet the nature of the service required and the needs of the client who may be a multinational mining company or a single mine owner. Thiess needs to be able to satisfy itself that each of the projects is meeting legislative and company requirements.

Thiess Management System

The environmental management system (EMS) that Thiess has developed reflects these needs. The company has a single environmental management system which is administered at the corporate level. This means that all of the company's mining projects, no matter where they operate, are required to implement the same system. Thiess' overseas subsidiaries are able to make modifications to reflect local conditions but must still meet the requirements of the corporate system.

Thiess' environmental management system is clearly mapped to the requirements of ISO 14001. However there is only one environmental procedure – detailing how to put together an environmental management plan. All the other requirements of ISO 14001 are integrated into other components of the Thiess Management System – such as the procurement, emergency planning, communication, incident notification procedure and auditing procedures. The key driver behind this is to make environmental management as integral a part of doing business as possible. For example, the tendering procedures require a full risk assessment, including environmental risks, to be undertaken before a tender can be submitted to a client.

Project Environmental Management Plan

Within the Thiess Management System, each project then has an Environmental Management Plan (EMP). Again, this is integrated as much as possible with the overall Project Management Plan. The corporate system sets the framework for the EMP and enables each project to address the specific site requirements and the client's needs in the most appropriate way. For example, a client recently developed an EMS for their organisation, working closely with Thiess. Due to the flexibility of our EMP, Thiess was able to dovetail into the client's requirements, making both the client's EMS and Thiess' EMP more efficient and effective.

The client holds the mining lease and the environmental licences and retains ultimate responsibility for the mine. Thiess is acting on the client's behalf and its key obligation to the client is via the contract. A further risk assessment is conducted in establishing the EMP. A critical component at this stage is clarifying responsibilities and accountabilities for environmental management and how Thiess and the client will work together. Examples of this include responsibility for planning and upgrading the water management infrastructure, agreeing success criteria for rehabilitation to enable client sign-off and determining responsibilities for liaising with the regulatory authorities. Agreement is usually achieved by a joint review with the client and agreement on areas of responsibilities and actions required. This review also provides assurance that the contractual requirements are consistent with Thiess' obligations under environmental legislation.

The Environmental Management Plan includes all the components of ISO 14001, such as:

- Legislative register
- Risk assessment
- Environmental objectives and targets
- Management controls
- Requirements for inspections, monitoring and auditing
- Training.

Any element that presents a significant environmental risk is required to have some form of management control. These may be dealt with in any relevant component of project management, such as mine planning, workshop infrastructure or a work procedure for topsoil management. Every effort is made to integrate environmental management into the way the project is run. This is particularly important as many projects do not warrant full-time environmental staff. It is essential that the Environmental Management Plan is succinct, clear and easy to understand. Communication to the workforce is achieved through the use of work activity briefings, job safety and environment analyses and toolbox talks.

Environmental Skills

Similarly it is important that Thiess staff have environmental management skills. For this reason, Thiess has developed internal environmental training programs that are tailored to the requirements of the organisation. A three hour course introduces all of our staff to the concepts of environmental due diligence and enhances their environmental awareness. A further two-day course for supervisors, engineers and managers provides more detail on legislative requirements and techniques for managing the specific environmental issues facing Thiess in its operations. These courses have been running since 1999 and are progressively improving the skills of Thiess personnel. This works hand-in-hand with the inclusion of environmental responsibilities and accountabilities in individual position descriptions.

Certification

Thiess' Australian operations are certified to ISO 14001 and the subsidiary companies PT Thiess Indonesia, Thiess South America, and Hunter Valley Earthmoving operate using the same environmental management system. Certification and an audited EMS bring the benefits of discipline and clear



commitment to environmental management. Thiess is a signatory to the AMI Code for Environmental Management. An EMS that works helps Thiess meet principles within the AMI Code. It helps Thiess minimise its environmental risks and impacts on the environment through working closely with clients, staff and other stakeholders. Above all it is a clear demonstration that Thiess has a strong commitment to minimising the environmental impacts of its activities.