

Making **SHEQ** a reality

As one of the more well-known names in the mining, metallurgical, energy and infrastructure industries, Hatch's health, safety, environmental and quality systems influence and affect the lives of hundreds of thousands of people globally

According to Hatch's corporate strategy, quality management is a critical integrated part of the overall project delivery process, and must be actively involved in all phases of the project, from proposal to study, through set-up to final handover.

Based on this ideal, the multi-national company has developed the Hatch Quality Management System (HQMS). HQMS' core focus is to exceed client expectations, achieve client satisfaction and embody the ideal of continuous improvement. This can only be achieved through utilising and empowering the company's two most important resources, its people and knowledge, which in turn requires advanced SHEQ processes to be in place.

The HQMS mandate states that Hatch aspires to be a leader in achieving the highest attainable standard in quality, the environment and health and safety, which the company believes is a prime value and cannot be compromised.

The ISO quality standards that Hatch adheres to are recognised throughout the world as the criteria for maintaining quality in the manufacturing and service industries. As an ISO 9001 accredited organisation, Hatch therefore emphasises the concepts of management responsibilities, continuous improvement and client satisfaction.

A holistic approach to quality exists at Hatch, broadly defined in terms of policy statements on health, safety, environment and community (HSEC), sustainable development, personal growth and community involvement, project execution through statements on performance reliability, scope, schedule, cost, and

communication, and a commitment to innovation and continuous improvement.

Hatch's quality function is directed by a proactive senior management group, and tools such as the "quality policy" and associated objectives are employed to cover quality related issues arising across the breadth of the company's operations. The management team is focused on continuous identification and implementation of improvement, including new methods, solutions and services. Each of these improvements enhances the quality of Hatch's work and therefore the value that it brings to its clients.

ACHIEVING QUALITY

Quality in project management is achieved through:

- formal kick-off meetings between the project team and client to ensure everyone is aware of project requirements;
- a project execution plan and project quality plan are developed to define and document how the requirements for the project and quality will be met;
- proper planning throughout all functions within the project is imperative;
- an alignment/training programme that ensures project participants understand the project goals, processes, and plans;
- a thorough change management process to mitigate the effect of change;
- regular progress reporting to the client and hatch management to identify accomplishments and potential issues in a timely fashion;
- regular communication of project status throughout all levels of the project organisation.

Quality in engineering and design is achieved through:

- proper definition and documentation of the basis and design criteria for engineering for all disciplines and systems;
- verification of the design implementation through formal discipline and inter-discipline checking processes;



- design reviews at appropriate stages to evaluate the proposed design, identify problems and required actions;
- reviews of externally prepared engineering documentation.

Quality in procurement is achieved through:

- the development of an approved list of suppliers;
- formal planning and scheduling of all procurement related activities;
- the review and acceptance of supplier quality programmes and inspection and test plans;
- appropriate expediting of documentation, materials and services;
- appropriate inspection activities, including ongoing documentation, at the supplier premises and in the field.

Quality in construction is achieved through:

- development of a construction management

plan and a construction quality plan,

- ensuring that relevant control systems are in place for the control and issue of client standards and specifications;
- adhering to a site procedures manual that references the practices used to execute construction in accordance with the project procedures manual;
- ensuring that any non-conformances are recorded and corrective action is planned, taken and monitored.

These quality functions at Hatch ensure that audit and review programmes are established on projects and reflect the importance and complexity of various project activities. Independent, qualified auditors and experienced reviewers are then utilised to conduct audits and reviews, and identified non-conformances are documented in accordance with procedures and followed up to ensure timely resolution. The status of audits/reviews and subsequent actions are tracked and reported at review meetings as well.

SAFETY FIRST

Hatch has developed three tools to ensure that safety principles and training are given the priority they need to provide a no-harm environment on projects, in the office, and at home. "Working together safely" is Hatch's main tool for training staff and partners in how to deliver principles of safety to both the company's people and projects.

In addition, Hatch's "safety web" is the primary tool used to access safety information such as policies, procedures, references and guidelines through an iPas SM (safety management) application, which project teams use to manage health and safety. iPas SM is Hatch's single electronically based source for consolidated reports on current safety performances on projects.

Over the past five years, Hatch's annual hours worked globally have jumped from 20 million to more than 40 million; yet, the company's lost-time injury frequency (LTIF) has maintained a rate of just 0.14 for every 200 000 project hours worked.

In Brazil, Hatch and its local partners completed a two-million-ton-per-year expansion of the Alumar alumina refinery and celebrated

20 million work-hours without a reportable incident.

In Alberta, Canada, the company has won the Best Safety Performer Award five years in a row, while in South Africa, Hatch has achieved a record of zero lost-time injury incidents in five million work-hours over a period of three years.

The Ngqura container terminal, a Transnet project, in South Africa, recently announced that its safety programme, designed and managed by Hatch, also reached three million work-hours without a lost-time injury. Phase B of the Anglo Platinum Converter Process in Rustenburg, South Africa, also had 1.2 million work-hours with no lost-time injuries, despite it being a congested site with project activity on several floors.

SUSTAINABLE FUTURES FOR ALL

The core goal of Hatch's HSEC (health, safety, environment and community) policy is to work together safely, thereby affecting no harm on people, the environment or communities that are in any way associated with projects and activities managed by Hatch.

This requires a diverse policy that covers health and safety, the environment, communities, sustainable development, the safe implementation of all practices and, above all, an attitude of responsibility and accountability.

Each of the above also needs to be appropriate to a given project, community or even country. What applies in Canada might not be appropriate in Brazil and South Africa, or vice-versa. Systems might be in place, but actual localised programmes need to be more specific.

In line with this ideal, Hatch also undertakes to respect the sensitivities and cultural heritage of communities within the influence of projects managed by the company, and to minimise each project's ecological footprint from project design and construction, through to its operation and even decommissioning.

Ultimately, it is multi-national companies that operate in a number of countries around the world, and who often find local and global attentions focusing in on their business practices, that develop the most successful and progressive SHEQ systems – systems that all industries and companies, no matter how big or small, can learn from. □

