When ENRC, a Kazakhstan based mining company, became one of the leading global industry players and floated on the London Stock Exchange in 2007, it set about benchmarking its performance in all areas against international standards.

Statistically, ENRC compares favourably with peer groups in Kazakhstan. However, the company was not satisfied with being comparable to other Kazakhstan mining organisations and sought to bring workplace safety to international levels. Despite strong commitment to safety at senior levels, as well as investment of US$ 60 million to US$ 100 million per annum into safety systems, ENRC’s safety performance had remained static over a ten year period.

The ENRC board, as well as the shareholders, saw the clear benefit of an optimised safety performance: secured business development, improved overall business efficiency, the provision of a safe workplace for employees and the fulfilment of its corporate commitment to the community. As a result, the company decided to call in outside help – a safety consultancy – to look at cultural behaviour management. DuPont was tasked with evaluating all of ENRC’s seven sites in Kazakhstan and one in Russia.

The ENRC Group consists of six divisions focused on exploration, mining, processing, power generation, logistics and marketing throughout Kazakhstan where it employs 65,000 people.

Of these, TNK Kazchrome near Aktobe is the biggest, managing all stages of the mining and smelting process, with all the inherent risks that it entails. The site, with 18,000 employees, is one of the largest ferrochrome producers in the world, exporting to all major international markets, from leading steel producers in the Americas to those in Europe and South-East Asia. For this reason, ENRC nominated Kazchrome as the pilot site in early 2009 to test the introduction of a new behavioural safety management system. As Kazchrome has four operating companies, DuPont initially worked with its Donskoy GOK Ore Mining & Processing Plant, the second largest chromium ore deposit in the world. Donskoy GOK was selected as the pilot for the group because of its size and integration of mining and processing within the one geographical site. The DGOK facilities, in which 7,500 employees work in mining and processing, include two main open pits, two underground mines and two factories.
THE SITUATION AT THE OUTSET

DuPont’s evaluation of ENRC’s sites was very positive about senior management commitment to safety and the fact that it was taken so seriously that operations at one pit were repeatedly halted in response to safety violations. The initial assessment also found a strong, well-organised safety department, a network of safety committees at each site and comprehensive safety training for all employees. However, in many instances there was a discrepancy between what managers said and did. Therefore, one of DuPont’s key recommendations was to improve the visible leadership and commitment to safety of managers to act as a motivational example to employees.

Another area for improvement was the strategic direction given by the company’s safety policy. Compliance with the law was the implied goal, limiting people’s ambition to attain higher safety standards and select global best practices against which to drive further improvement. In addition, there was a lack of specific, measurable and time-sensitive goals and objectives for the short or medium-term, making it very difficult to track progress. Furthermore, the DuPont consultants felt that the motivation of the staff was based more on the threat of punitive action than on positive encouragement.

The evaluation also identified other barriers such as the fact that accepted risks were too high, the safety message was not adequately communicated, production had priority over safety at some sites and employees did not personally feel responsible for safety.

SETTING A BASELINE

As in so many aspects of life, merely meeting legislative requirements is not sufficient to produce outstanding results. In the case of Kazakhstan, local legislation tends to focus on fatalities. The company therefore had to set different, additional targets to those imposed by national regulations if it were to reach international safety performance levels – the company had to go beyond compliance.

To be able to establish a target and calculate improvement, one of the first steps for the company was to collect statistics to create a baseline. ENRC operates in a culture where there can be perceived pressure to under-report. With the help of DuPont, the company set about increasing its range and consistency of statistical reporting, tracking not only fatalities, but also other incidents and near-misses. It is now working with the government in Kazakhstan to change reporting at state level.

TACKLING SAFETY BARRIERS

The first goal for ENRC’s Donskoy site was to improve safety performance by 10 per cent on the newly established baseline. However, the site also hoped for a quick win. And there were some areas where this was indeed achievable. Two tools in particular started to achieve quick improvement in proactive safety thinking. These tools were behavioural audits, which involve two way dialogues with workers about safety, and cascade safety committees, where safety issues are discussed and action plans created through discussion between line management and HSE specialists.

However, fast results are generally achieved when companies switch from a non-compliant to a safety regulation compliant culture. The changes that come in the next stage when companies move from being compliant to achieving best practice generally take longer to take effect.

These sustainable long-term changes at Donskoy GOK came about by tackling the barriers highlighted in the initial DuPont evaluation. To address the lack of visible leadership by example, DuPont ran leadership and communication training, coached the safety committee chairperson and helped to set up a management appraisal system. Instead of issuing prescriptive instructions, leaders now motivate by example, setting signals for expected behaviour and attitudes; and by discerning employees’ ambitions, then using this towards achieving a common goal.

Safety policies were overhauled by putting in place risk assessment, incident investigation and reporting standards. The result is easy-to-follow health and safety procedures that are clearly communicated through training, coaching and other communication tools. Employees also know they will be checked and enforced through audits.
In the case of Donskoy GOK, these new standards apply to a wide range of issues covering general topics such as behavioural safety, as well as more specific areas such as hot work, electrical safety, confined space entry or working at heights. DuPont also provided policy and vision workshops where senior management developed their safety goals and plans to achieve.

The cultural change, which is so critical to behaviour and attitudes to safety, was addressed not only by the introduction of behavioural safety standards, but also through training to enable ENRC management and supervisory personnel in line management roles, to conduct behavioural audits. In addition, DuPont conducted key safe behaviour workshops and provided communication skills coaching.

**CHANGE LEADS TO REDUCED ACCIDENT AND SICKNESS RATES**

As a result of these changes, the Donskoy site has replaced its previous administrative command approach with a cascade committee system. The entire organization is now responsible for safety instead of regarding it as the sole responsibility of the safety specialists and safety meetings have become much more targeted.

Communication has also become a good deal freer and easier. Whereas in the past, employees could only report to their supervisors because of the strict management hierarchy, they can now have open discussions in behavioural audits, through safety committee representatives, safety meetings and risk assessment activities. Communication has thus become a two-way process.

The key difference, though, is the change in focus. No longer is it the external inspection requirements that dominate, but rather the internal behavioural safety audits that focus on any unsafe behaviour and on safety perception. This has lead to the company identifying injury causes which were not previously taken into account and recognising issues such as posture which can also lead to long-term ill effects and lack of productivity.

These actions have also led to a 61% reduction in the number of lost time injuries, and a 60% reduction in the lost time injury frequency rate.

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The ENRC Group is a leading diversified natural resources group with integrated mining, processing, energy, logistical and marketing operations. It is one of the world’s largest producers of ferrochrome; one of the world’s significant exporters of iron ore; the world’s ninth largest producer of traded alumina; and one of the largest electricity providers in Kazakhstan. With over 72,000 employees worldwide, ENRC operates in Kazakhstan, China, Russia, Brazil and Africa (the Democratic Republic of Congo, Zambia, Mozambique and South Africa). Annual sales in 2010 were in excess of US$ 6.6bn.