

We are motivated by a clear destination—a more sustainable tomorrow that requires the natural resources Teck can provide. We are committed to unearthing the potential of our resources by considering people, the environment and our Communities of Interest, now and in the future, with every decision we make.

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The front cover of our Summary Sustainability Report shows a person walking along a boardwalk with a backdrop of mountains and trees, symbolizing our company's progression towards a more sustainable tomorrow that requires the natural resources we can provide.

Teck is a diversified resource company committed to responsible mining and mineral development with major business units focused on copper, steelmaking coal, zinc and energy.

We are headquartered in Vancouver, Canada. We own, or have an interest in, 13 mines in Canada, the USA, Chile and Peru, as well as one metallurgical complex in Canada.

We have expertise across the full range of activities related to mining and minerals processing and stewardship, including exploration, development, smelting, refining, safety, environmental protection, product stewardship, recycling and research.

We are actively exploring in the Americas, Asia Pacific, Europe and Africa.

### **Our Memberships**

Our commitments to external organizations include:



We support the United Nations Global Compact and its 10 Principles covering human rights, labour, environment and anti-corruption.



We are a member of the International Council on Mining and Metals (ICMM) and are committed to implementing the ICMM Sustainable Development Framework.



We are a member of the Mining Association of Canada and participate in Towards Sustainable Mining (TSM), conducting self-assessments at our Canadian operations which are subject to third-party verification in accordance with TSM standards.



We were selected for the Dow Jones Sustainability Index (DJSI) World Index in 2010, reflecting a position in the top 10% in our industry. DJSI tracks the performance of leading sustainability-driven companies worldwide.

For a complete list of our memberships and supported initiatives, please see our the website or 109 Sustainability Report.

## Our Approach

### **About This Report**

Thank you for reading our ninth annual Sustainability Report.

Our sustainability report provides an overview of the sustainability issues we face, our approach to managing these issues and our performance.

The audience for this report is broad and includes our primary Community of Interest groups including: academic and thought leaders, employees, governments and regulatory staff, Indigenous Peoples, industry associations, investment communities, local communities, nongovernmental organizations, peers and business partners and suppliers.

We present our sustainability report in a range of formats to meet the needs of our audience.

- Sustainability Report and Website—provides an overview of the sustainability issues we face and more information on our policies, management approach, and performance. You can find the Sustainability Report in the form of a complete PDF as well as in our website pages online at \@www.teck.com.
- Summary Sustainability Report—provides a general overview and summary of our sustainability report.

### Reporting Approach

Our report is prepared in accordance with the Global Reporting Initiative (GRI) Third Generation (G3) Guidelines. The GRI Reporting Principles, Technical Protocols, Indicator Protocols and the Mining and Metals Sector Supplement (January-April 2009 Draft) guided the development of this report. We aim to align our approach with AccountAbility's AA1000 standards and its principles of inclusivity, materiality and responsiveness.

### Scope

We disclose sustainability data from January to December 2009. Information relating to subsequent periods that is determined to be material may also be included.

Guided by the GRI Boundary Protocol, we have included performance data on all of our managed operations. During 2009, we sold our 50% interest in the Hemlo mines, our 40% interest in the Pogo mine, our 60% interest in the Lobo-Marte project in Chile, and our 78.8% interest in the Morelos project in Mexico. They are therefore no longer included in our reporting scope.

We have provided local information, figures and

commentary from the following when appropriate:

- Antamina, an independently-managed mine in which we have a 22.5% economic interest
- Exploration and technology activities

Our 2009 performance data presents numerical data using the metric system and Canadian dollars, unless otherwise noted.

### **Assurance**

We resumed our verification program and for the first time, progress in both GRI reporting and the alignment of our practices with the International Council on Mining and Metals' (ICMM) Ten Sustainable Development Principles were reviewed by Environmental Resources Management (ERM), an independent consulting firm, using the ICMM Assurance Framework. GRI has also checked our reporting against the application level criteria and have confirmed our sustainability report to be at the A+ application level. Please see the GRI Finder on our \*\text{\theta} website or \begin{align\*} \begin{align\*} \text{100} \text{ Sustainability} \end{align\*} Report to view a full list of GRI indicators and responses.



#### Contact

We welcome your comments, questions and feedback on our sustainability reporting. You can contact:

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### **Key to Symbols Used in This Report**



Case Study



Your Concerns, Our Response Issue



Web Link



**XX** More information available in page xx of our Sustainability Report, available for download online



**XX** More information available in page xx within this Summary Sustainability Report



Don Lindsay, President and CEO, on a safety tour at Highland Valley Copper. Senior leaders across the organization demonstrate commitment to safety by participating in the Visible Felt Leadership Program, which involves actively engaging employees around safety in their work area.

## Message from the CEO

This report's theme—Unearthing Potential—is about gaining a deeper understanding of how Teck can best contribute to a more sustainable future while creating value for our shareholders. Over the long-term, we believe our success and competitiveness will depend on our ability to anticipate, understand and collaborate to address the needs and priorities of people who are our neighbours in areas where we operate, or who may enjoy an improved quality of life as a result of the products we produce.

### **Our Approach**

We recognize that we have the responsibility to mitigate risks and to work with communities and host governments to create sustainable benefits from our operations for present and future generations. Our approach to sustainability has been informed through our participation with associations focused on fostering progress on sustainability, including the International Council on Mining and Metals and its Sustainable Development Principles, the United Nations Global Compact and the Mining Association of Canada's Towards Sustainable Mining initiative.

### **Our Progress**

In late 2009 we established a sustainability leadership

initiative that would help us to create a culture where everyone considers people, the environment and communities, now and in the future, with every decision we make. With this in mind, in 2010 we convened an internal cross-functional working group composed of leaders from each business unit and functional area in the company tasked to gain a deeper understanding of sustainability, how Teck can contribute to it and how we can embed consideration of sustainability into our day to day decisions.

#### Safety and Health

The safety and health of our employees, our contractors and their families is a core value. We believe that everyone should go home safe and healthy every day. In 2009, each operation implemented Courageous Safety Leadership (CSL), which is a safety philosophy that challenges existing beliefs, values and attitudes towards safety and outlines the change required to instill a true culture of safety. To date, over 10,000 Teck employees and contractors have experienced phase one of the CSL journey – an intensive one day training session – representing a significant step forward in aligning our organization around a common vision for safety.

Despite our efforts, we did not achieve our goal of "Zero



Don Lindsay, President and CEO.

Incidents" and are saddened to report three fatalities occurred at our sites in 2009. We will continue to focus on Courageous Safety Leadership – working to enhance personal leadership and commitment around safety – so that everyone goes home safe and healthy every day.

#### **Environment**

Biodiversity conservation is an integral part of how we operate. We progressively reclaim disturbed lands throughout the mining life cycle, maintain active habitat management programs and are committed to creating positive legacies through the responsible management of closed and dormant mines.

Energy use and greenhouse gas (GHG) emissions management is a key focus given the energy-intensive nature of our operations. Improvements in energy efficiency for 2009 were highlighted by target-setting at a number of our operations, improvements to our coal-drying systems and reductions in engine idling. We also continue to pursue and implement renewable energy projects.

Water quantity and quality remain sustainability challenges and in 2009, as part of our efforts towards sustainable water management, we developed a Water Management Policy which is undergoing internal review. Water use monitoring at operations assist us in advancing water conservation programs and through mitigation and application of treatment methods, our operations improve the quality of water entering local receiving environments.

### **Working with Communities**

The Environment, Health, Safety and Community
Management Standards were expanded in 2009 to include
new standards on Community and Indigenous Peoples and
on Human Rights. We also developed a Social Management
and Responsibility Toolkit (SMART) to help business
functions manage social risks and opportunities, trained over
130 people in effective dialogue, revised our project review
process to consider social and community aspects, and
developed a company-wide sustainability data management
system to track and report on sustainability data.

#### Outlook

We recognize society's need for our products - our major products, steelmaking coal, copper, and zinc - are essential to improving the quality of life for people around the world. We collaborate with the International Zinc Association and UNICEF on the Zinc Nutrient Initiative, which aligns with the Millennium Development Goals and utilizes one of our core products to help eradicate zinc deficiency, a major health challenge worldwide. As we look forward, we recognize that society's reliance on energy produced from oil will continue for the foreseeable future, and we will carefully assess how we, as an owner of significant resources in the Alberta oil sands, can utilize those resources responsibly. We will work to promote resource stewardship through continuous improvements in efficiency and recycling, believing that if we are to achieve a truly sustainable world in the face of a growing global population, we need to be leaders in resource efficiency through our own example.

Donald R. Lindsay

President and Chief Executive Officer

### We are Teck

We are a diversified resource company committed to responsible mining and mineral development. Through our interests in mining and processing operations in Canada, the United States and South America and exploration around the world, our expertise spans the full range of mining activities. These include: exploration, development, smelting, refining, safety, environmental protection, product stewardship, recycling and research.

Our company is managed along commodity lines focused on copper, steelmaking coal, zinc and energy. Worldwide, we are an important producer of copper, the second largest exporter of seaborne metallurgical coal and second largest producer of zinc concentrate.

### Copper •

Our copper business includes the Highland Valley
Copper mine in British Columbia, the Antamina mine in
Peru, the Quebrada Blanca and Carmen de Andacollo
mines in Chile and the Duck Pond copper-zinc
mine in Newfoundland. In 2009, our copper

business produced 308,000 tonnes of copper, accounting for 37% of our operating profit and 28% of our revenue.

### Coal •

Teck is the world's second largest exporter of seaborne steelmaking coal. Our coal business consists of six mines: five in British Columbia and one in Alberta. Coal sales were 20 million tonnes in 2009. This accounted for 47% of our operating profit and 46% of our revenue.

#### Zinc •

Our zinc business includes the Trail smelting and refining complex in south central British Columbia, the Red Dog mine in northwest Alaska and the Pend Oreille mine in Washington State. Production for the year was 711,000 tonnes of zinc in concentrate and 240,000 tonnes of refined zinc. Our zinc business contributed 16% of our operating profit and 26% of our revenue in 2009.

#### Energy •

Our energy business includes a 20% interest in the Fort Hills oil sands project and a 50% interest in other developing oil sands leases. All of these properties are located in the Athabasca region of Alberta.



## The Mining Life Cycle

We work with our Communities of Interest (Cols) through meaningful dialogue to achieve mutual benefits throughout the mining life cycle, outlined in this diagram.

### Stage 1 Mineral Exploration

2-4 years



The search for valuable mineral resources in the earth's crust

- Geologists review maps and reports, and use satellite imagery, sensors and computers to survey large areas of land.
- Activities include trenching, exploratory drilling, sampling and mineral assays.
- Once the mineral resources have been confirmed, an assessment of the project's economics and scale is conducted.

### Responsibility:

 Activities include management of health and safety and environment issues and early identification, dialogue and engagement with Cols.

# 5-10 years

### **Stage 2** Deposit Evaluation

- Activities include social and environmental baseline studies, advanced geological and metallurgical studies through increased drilling, preliminary design and engineering assessment of the economic feasibility of the resource.
- The team grows to involve on-site geologists, drill rig operators, support staff and a community relations team.

### Responsibility:

 Activities include continuing engagement with Cols, including participatory involvement in mine development scenarios and sharing information on social, environmental and economic needs and priorities.



Evaluation of the mineral deposit to determine mine feasibility

### Stage 3 Mine Planning

### 5-10 years

- Engineering and economic assessments determine whether the mine will be open pit or underground, the infrastructure required and the location of related facilities.
- A decision as to whether development should proceed is made in conjunction with local and government authorities.

### Responsibility:

 Impact mitigation assessments are conducted and engagement with Cols identifies opportunities and concerns which influence mine plans for operation, closure and reclamation.



More detailed design, engineering and economic assessments

### **Stage 4** Mine Construction and Operation

### 5-100 years



- A large number of people are employed to construct the mine, including carpenters, electricians, heavy equipment operators, warehouse technicians, safety and environment coordinators, engineers, geologists, scientists and accountants.
- · Mine operations employ professionals, management and skilled trade persons in four main work areas: excavation, processing plants, waste storage and support services.

### Responsibility:

- We work towards reducing social and environmental impacts through the management of issues including but not limited to water quality and quantity, biodiversity, human rights, wildlife conservation, air quality and fisheries.
- Economic benefits of the operation may be maximized through promotion of local hiring and local suppliers.
- · Cols participate in developing partnerships for longterm community investment programs focused upon locally-identified needs and resources.

### Operation of an Open Pit Mine

Above is a diagram which illustrates the typical operation of an open pit mine. This diagram is not specific to a Teck operation.

- 1. Break the ore by drilling and blasting.
- 2. Load the broken ore into a truck with a shovel.
- 3. The truck transports the ore into the crusher and the waste rock to the waste rock dump.
- 4. The ore is crushed in the crusher and transported via a conveyer to ore stockpiles.
- 5. Conveyors bring material from the ore stockpiles to the concentrator, also known as the processing plant or mill.
- 6. In the concentrator the ore is ground to a fine sandlike particle size and chemically and mechanically treated to separate the final product, which is a mineral concentrate, from the tailings.
- 7. Tailings, ground rock which has no economically recoverable mineral content, is mixed with water and transported in a pipeline to a tailings impoundment, also known as the tailings management facility.
- 8. Mineral concentrate is transported to our customers.

### **Stage 5** Mine Closure

### 2-10 years



The three main phases of mine closure include:

- Decommissioning dismantling of site infrastructure (e.g., facilities, buildings).
- Final Reclamation completion of the restoration of disturbed areas (e.g., re-vegetating).
- Post-closure care and maintenance monitoring the success of reclamation works, long-term water capture and treatment.

### Responsibility:

- We work to eliminate/minimize public safety risks and environmental impacts from our closed properties.
- We work with our Cols to establish future land uses of the site that are beneficial to the community at large.
- We are committed to preparing closed sites to reach final closure through reclamation/rehabilitation which ensures the long-term sustainability of the ecosystem and the landscape. The environment is monitored in perpetuity, if warranted.

### Material Issues

We conducted a materiality analysis to determine the threshold at which an issue is sufficiently important that it should be reported. For the purposes of this report, we regard materiality as information that has the potential to influence the perception of Communities of Interest (Cols) and those who intend to make decisions and assessments about our commitment to sustainability.

Guided by AccountAbility's Five-Part Materiality Test, we reviewed issues related to or identified by our policies and standards, financial, risk and governance performance, peer companies, our Cols, societal standards or regulatory frameworks, and issues identified at the operational level. We identified 15 material issues which we have grouped under six main categories, as shown in the table below.

### Safety and Health

### Safety and Health

#### What does it cover?

- Worker safety (employees and contractors)
- · Worker health and wellness
- · Community safety and health

#### Why is it important?

The mining business can carry inherent risks that

can affect the safety and health of our workers and neighbouring communities.

### What do our Communities of Interest expect of us?

Make safety and health the top priority in any situation. Build, maintain and continuously improve safety and health systems. Fix problems promptly and notify anyone who could be affected.

### What are we doing?

Over 2009, we embarked on implementing Courageous Safety Leadership (CSL) with the goal of developing a stronger culture of safety. Safety has been firmly established as a core value. Our vision is "Everyone Going Home Safe and Healthy Everyday." See our CSL case study for more information 17.

### **Employee Practices**

### **Employee Practices**

### What does it cover?

- Workforce
- · Diversity and equal opportunity
- · Employee engagement, retention and attraction
- · Labour management relations

### Why is it important?

Our employees have a diverse set of high value skills and many work in physically demanding environments. We must be seen as a good

employer to attract and retain the highly skilled employees and contractors.

### What do our Communities of Interest expect of us?

Adhere to international labour codes and national workplace standards. Support employees and help them transition when a mine site closes. Safety and health policies and training should apply to contractors

### What are we doing?

We continued employee recognition programs across the company. Our Olympic Going for Gold program identified employees who made positive contributions to their communities while the Excellence Awards program recognized individuals who made a significant contribution to Teck. The Pend Oreille case study 237 describes how we assisted employees in transitioning careers when the mine was put on care and maintenance. We continue to train contractors in policies and practices as well as in Courageous Safety Leadership.

### Environment

### **Environmental Management**

### What does it cover?

- · Overall environmental management practices, structure and systems
- · Continuous improvement
- · Environmental compliance
- · Permitting
- · Environmental audit process
- · Materials, Spills, Compliance, Dust Management

### Why is it important?

We operate in environments that may be highly valued for reasons beyond mining. Our business is highly regulated and our success depends on

consistently demonstrating a high standard of care for the environments we work in.

### What do our Communities of Interest expect of us?

Apply the precautionary principle in decisions affecting the environment. Design and implement strong and effective environmental management systems wherever we operate. Comply with environmental regulations.

#### What are we doing?

We are committed to the certification of all operating facilities to ISO 14001. By July 2010, 11 of our facilities had attained or maintained certification.To assure that our environmental management systems are effective and to promote continual improvement, each operation that is certified to the ISO 14001 standard receives an annual audit by an external, accredited ISO 14001 audit service provider. In addition to management system audits through our ISO 14001 program, we routinely conduct compliance audits at our operations. Each operation receives a third-party compliance audit on a three-year cycle.

### **Energy and Climate Change**

#### What does it cover?

- · Energy use
- · Greenhouse gas (GHG) emissions
- · Energy efficiency innovations
- · Climate change impact

#### Why is it important?

Mining is an energy intensive business with a significant carbon footprint. Our operations may also be affected by changing climate patterns.

### What do our Communities of Interest expect of us?

Consider climate impacts in our business decisions. Operate energy efficiently, reducing our carbon footprint per unit of production. Plan to reduce net emissions, even as output grows.

#### What are we doing?

With our commitment to the efficient use of energy, we have begun to develop, and at some sites implement, energy and GHG emissions

targets. A number of initiatives to reduce GHG emissions have also been undertaken, including programs aimed at reducing vehicle idling and research into fuel switching in product dryers at some of our operations. We are also disclosing our GHG emissions more broadly through a number of avenues, including the Dow Jones Sustainability Index, the Carbon Disclosure Project and the Mining Association of Canada's Towards Sustainable Mining program.

#### Water

#### What does it cover?

- · Water use
- · Water quality
- Historical water pollution
- · Tailings, effluents, spills and leaks
- · Impacts on other water users
- · Impacts on aquatic ecosystems

### Why is it important?

Some mining processes require significant amounts of water, which can affect other water users. Unplanned discharges from mines have the potential to affect the health of people and ecosystems.

### What do our Communities of Interest expect of us?

Respect the needs of other water users. Plan and operate to minimize the mine's water demands. Operate to the highest standard of care in relation to tailings and effluents.

#### What are we doing?

We are developing a water standard with the objective of minimizing upstream and downstream impacts of our operations. This will be accomplished by maximizing water conservation, re-use and efficiency measures as well as adapting best practices to local conditions for water diversion, use, re-use, storage, treatment and decommissioning over the life cycle of the operation.

### **Biodiversity and Ecosystem Impacts**

#### What does it cover?

- · Effects on biodiversity
- · Cumulative effects
- · Ecosystem and landscape impacts
- · Land reclamation
- · Dormant property management
- · Tailings management

#### Why is it important?

Mining has an impact on the landscape until the time that the lands and roads are reclaimed. Some mines are located in places with high biodiversity values. Mine reclamation is a requirement of operation. Preparing for eventual closure rehabilitates the landscape and minimizes disruption to local economies.

### What do our Communities of Interest expect of us?

Participate in land use planning processes that are sensitive to other users of the landscape, including subsistence users. Consider the cumulative effects of all the industrial users and associated roads on the ecosystem. Plan and operate to minimize impacts on vulnerable species and ecosystems. Plan and fund the restoration of the local landscape and ecosystem. Where possible, clean up historical pollution and continue to work towards preventing future negative legacies.

### What are we doing?

As part of the development and implementation of our progressive mine reclamation plans, we consider and incorporate biodiversity management principles and activities, such as the appropriate selection of site-appropriate species for planting during reclamation. The latter includes (among other practices) the use of native, indigenous tree and shrub species, which support appropriate habitat for locally-important wildlife and are consistent with the biogeoclimatic landscape. As our biodiversity practices and activities evolve and become more formalized, operationspecific biodiversity management plans are being developed and used across the company.

### **Product Stewardship**

### What does it cover?

- · Materials management
- · Supply chain responsibility
- · Solid waste management
- · Materials recovery and commercialization
- Products for sustainability (e.g. zinc)

#### Why is it important?

Many of the products of mining are in great demand in a sustainable economy. Some of these can be effectively recycled.

### What do our Communities of Interest expect of us?

Ensure the safe handling of mining products throughout the supply chain and life cycle. Leverage our technical expertise to increase the recycling of metals.

### What are we doing?

We continue to manage our product stewardship activities by means of a corporate Product Stewardship Committee (PSC). The PSC is a cross-functional team, overseeing existing

product information through the application of risk management principles. The PSC provides guidance and direction on new products and other related business ventures, conducting on-going reviews aimed at assessing the safety and sustainability of our products. The PSC reviews new applications, uses and potential new sales jurisdictions for our products in order to assess transportation and handling, packaging and labeling, safety and health and life cycle stewardship aspects.

### Economic Development

#### Land Use and Access

#### What does it cover?

- Access to land
- · Land tenure

#### Why is it important?

Exploration is the first stage in the mining life cycle which requires access to large tracts of land in order to find minerals, considered a hidden resource. It is also the first point of contact with communities. Communities of Interest (CoIs) are curious to know who we are and what we are doing. If valuable resources are discovered, secure

mineral tenure to maintain access is essential to justify the large investments of time and money needed to advance mine development. When we explore where people are living, or in an area they are actively using or have tenure rights, our presence could have an impact on those people.

### What do our Communities of Interest expect of us?

Ensure our geologists and other employees who have contact with communities engage with Cols early in the exploration cycle.

### What are we doing?

The impression that we make early on sets the tone for all future interactions with local Cols. Building on good practices in community engagement, we continue to train exploration teams on how to approach communities during exploration from a collection of tools and guidelines based on the Social Management and Responsibility Toolkit (SMART), which are designed to help our staff manage social issues around projects.

#### **Business Ethics and Governance**

#### What does it cover?

- · Ethical business practices
- Legal compliance
- · Corruption/business integrity
- Transparency
- Governance practices (including executive remuneration, board independence, etc.)

### Why is it important?

Sound governance systems protect the interests of investors and other Cols and ensure Teck is well

managed. Strong, well-communicated systems of business ethics help staff and management make ethical decisions, which are essential to preserving trust in Teck.

### What do our Communities of Interest expect of us?

Adhere to best practice in corporate governance and business ethics such as the Extractive Industries Transparency Initiative (EITI).

Communicate consistently and strongly about

ethics. Support staff and management to practice ethical decision-making at all levels.

### What are we doing?

We continue to support the EITI and report on our activities affiliated with this initiative where we have operations in participating countries (Peru).

### **Distribution of Economic Costs/Benefits**

#### What does it cover?

- · Revenue sharing with communities
- Procurement and local hiring
- · Wages and salaries
- · Pension plans
- Taxes

### Why is it important?

Mining will be a valued economic activity where its costs and benefits are seen to be fairly distributed.

### What do our Communities of Interest expect of us?

Pay a fair share of taxes and royalties in the jurisdictions where mines are located. Create opportunities for long-term, sustainable economic development. Train and employ local people, including for management positions. Buy supplies locally. Ensure that mine operations do not damage fisheries, other resources, or other economic uses.

### What are we doing?

As part of our SMART tool, we developed a Guideline on Local Content and Facilitating Local Access (local employment, goods and services) for our community relations practitioners to help build a consistent approach to local content programs.

### Society

### **Social Management**

#### What does it cover?

- Overall social management practices, structures and systems
- · Social impacts
- · Capacity building

### Why is it important?

Company actions have impacts on social and political structures and relationships in communities. The more unstable the society, the more likely that external actors who enter these societies negatively impact (exacerbate instability

and conflict) or positively impact (support systems and promote stability) communities.

### What do our Communities of Interest expect of us?

Engage with communities at early stages of mining and throughout the mining life cycle to gain a social license. Design and implement strong and effective social management systems wherever we operate. Comply with regulations and demonstrate broad community support. Leave

communities better off when we leave than when we first arrived.

#### What are we doing?

Like environmental management, to ensure we are identifying, managing and mitigating social risks and capitalizing on opportunities, we must have management systems in place. Ensuring positive benefits requires the right policies and processes and people with the right skills and abilities in social management.

### **Indigenous Peoples**

#### What does it cover?

- · Indigenous rights
- · Government negotiations
- · Agreements with First Nations and indigenous economic development offices
- · Employment opportunities
- · Impacts on traditional lands
- · Cultural and social effects
- · Pinchi Lake Legacy Fund

#### Why is it important?

Some mines are located on the traditional lands of Indigenous Peoples. Operations can affect the homes, culture and livelihood of Indigenous Peoples.

### What do our Communities of Interest expect of us?

Respect the rights of Indigenous Peoples. Involve Indigenous Peoples in decisions that could affect

them. Work with Indigenous Peoples to create opportunities for economic involvement and longterm development.

### What are we doing?

Recognizing indigenous groups as an essential partner in our exploration work, our North America and Australia exploration groups undertook training this year on working with Aboriginal groups.

### **Involving People Affected by Our Activities**

#### What does it cover?

- Social impacts
- · Involuntary resettlement
- · Community engagement
- · Engagement with other stakeholders (e.g. around oil sands development)
- · Building dialogue and community relations capacity

### Why is it important?

The neighbours of mining operations are those most likely to be affected by its operations. They provide the mine with its social license to operate.

### What do our Communities of Interest expect of us?

Engage honestly and transparently with Cols, including people directly affected by operations. Consider local concerns at the earliest possible stage of the mining cycle. Ensure fair negotiations by leveling the playing field in respect of the knowledge, power and resources needed to engage. Ensure traditionally vulnerable members of local societies can participate in the engagement process.

#### What are we doing?

Currently, all operations and projects are involved in engagement with Cols. Teck has been developing a more robust social management program to support our external commitments, our internal policies and commitment to sustainability and to leaving communities better off after we leave. Since 2009, we continued to develop the Social Management and Responsibility Toolkit (SMART), a set of tools and quidelines to help our staff manage social risk and performance.

### **Sustainable Community Development**

#### What does it cover?

- · Community partnerships and investment
- Corporate community giving/Donations
- · Community capacity building

### Why is it important?

The boom and bust cycle that frequently accompanies mining creates social impacts in both boom and bust times. Mining should create net positive legacies for surrounding communities.

### What do our Communities of Interest expect of us?

Plan operations so as to minimize disruption to local culture and demand on local social services. Engage local communities in prioritizing community needs throughout the mining cycle and work with communities to support the transition to a sustainable post-closure economy.

#### What are we doing?

We are moving towards more strategic community investment focused on good practice principles including: strategic, aligned, multi-CoIdriven, sustainable and measureable. This will be a multi-year project for us beginning with guidance and capacity building at our sites through SMART tools and training, staff dedicated to community development and investment and changes in reporting to better reflect impacts, value and change.

### **Human Rights**

### What does it cover?

· Human rights as set out in the United Nations (UN) Declaration and other internationally recognized codes.

### Why is it important?

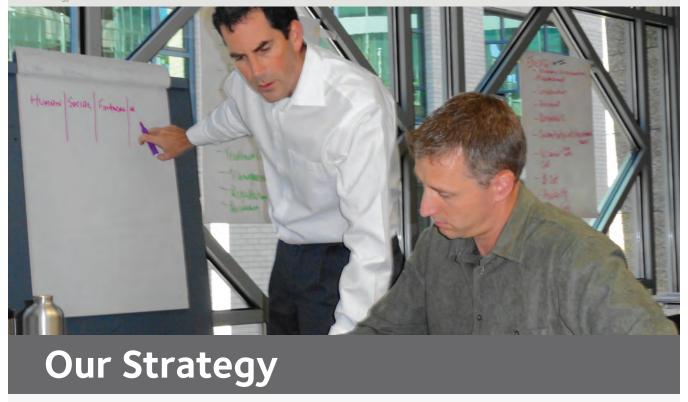
Human rights have been explicitly codified by national governments and international institutions.

### What do our Communities of Interest expect of us?

Identify threats to human rights at the earliest stages of the mining cycle. If human rights cannot be assured, reconsider investing in the region. Ensure that all staff, management, security personnel and local community members know how to respect human rights. Avoid involuntary resettlement. Establish a safe and effective grievance procedure, monitor it closely and follow up fairly with affected people.

### What are we doing?

We reviewed our human rights management against our standards, leading best practice and the UN Special Representative on Business and Human Rights framework. Moving forward, we will build on identified strengths and use recommendations from the review to guide us.



### Sustainability at Teck—Yesterday, Today and Tomorrow

Historically, we have managed the interconnection of sustainability issues through both company-wide policy and assurance programs and locally adapted, operation-specific measures. In addition to ensuring compliance with regulations we also pursue voluntary sustainability initiatives such as working with the International Zinc Association's fertilizer and zinc supplementation program, our electronics recycling program at Trail and a range of activities highlighted in case studies throughout our report.

We manage sustainability issues through our Environment, Health, Safety and Community (EHSC) Management Standards and our EHSC Assurance Program (P14 See Our Management Systems). We use both task management and data management systems. In addition, our Stage Gate process is designed to ensure that projects only proceed when they pass an extensive set of checks and balances at each stage of their development, ensuring compliance with company policy and EHSC Management Standards. We continue to improve our management systems, assurance programs and voluntary initiatives to maintain high performance standards and effective risk management.

Looking to the future, we see the sustainability landscape continuing to evolve with the escalating expectations of society. This presents us with challenges and opportunities which must be responsibly managed in order to maintain our social license to operate. In a world that demands

increasing transparency, third-party verification as well as collaboration, our commitment to external organizations has increased. Some of the external sustainability-related initiatives we are involved with include:

- International Council on Mining and Minerals (ICMM)
   Sustainable Development Framework
- Dow Jones Sustainability Index (DJSI)
- · Global Reporting Initiative (GRI)
- International Standards Association (ISO 14001)
- Mining Association of Canada's Towards Sustainable Mining Initiative (TSM)
- United Nations Global Compact initiative, including pursuit of the Millennium Development Goals

Our participation in these initiatives provides us with guidance and allows us to evolve with the best sustainability practices in our industry. We aim to define a clear vision of our destination based on sound sustainability science, our business strategy and dialogue with our Communities of Interest (Cols). To achieve our sustainability vision, we are guided by our external commitments, dialogue with Cols, voluntary international standards and regulatory requirements and peer benchmarking. With our sustainability vision in mind, we evaluate our current challenges and opportunities and

implement actions that bring us closer to our envisioned future. Please see below for a diagram which visually illustrates our sustainability strategy and movement towards our vision and long-term goals.

In our 2008 Sustainability Report we outlined our progress towards developing a shared sustainability vision for our company. Our mission was described as finding, extracting and providing natural resources to society for the benefit of present and future generations—"Resource Stewardship for Generations."

In 2009 we developed our capacity by beginning an employee and Col engagement process to systematically discuss how best to define and apply sustainability at Teck. Throughout the year we received input from our employees, an external review panel and senior management.

In late 2009, our President and CEO, Don Lindsay, identified the launch of our sustainability leadership initiative as a corporate priority for 2010, to both enhance and maintain our social license to operate. With the belief that our employees are our most important source of innovation, we sought to develop a sustainability leadership initiative that engages employees in sustainability. In 2010 we convened a group of cross-functional managers from across the company, including employees from operations, human resources, environment, communications and more. This group, supported by the expertise of our Sustainability and External Affairs (SEA) team and other sustainability experts, will play a pivotal role in integrating and embedding improved sustainability performance at Teck.

Some of the key objectives of the cross-functional group are to foster understanding of how sustainability relates to our business activities, encourage personal leadership

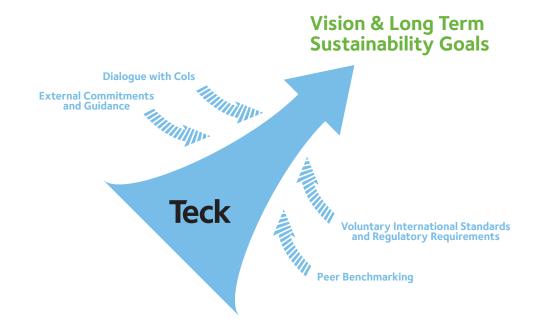
in sustainability and deepen our culture of sustainability by 2012 or sooner. Our goal is to create a culture where everyone is empowered to look at their decisions through a sustainability lens, instilling a mindset that continuously considers sustainability in everyday actions.

2010 will be a year of direction-setting, planning and testing. We will deepen our cross-functional integration of sustainability thinking throughout the company. The long-term goals and associated targets we are currently formulating will be monitored and discussed in future reports. In 2011 and beyond, the cross-functional group, supported by the expertise of the SEA group will continue to lead the company-wide sustainability leadership initiative.

- **22** A table outlining our progress in respect of our objectives and actions for 2009 can be found in our Sustainability Report or on our 4 website.
- 109 A complete list of our memberships, alliances and resources can be found in Appendix B of our Sustainability Report or on our \$\forall \text{ website.}
- **21** More information on the goals of the cross functional group can be found in our Sustainability Report or on our hwebsite.

### Our Management Systems

We manage Environment, Health, Safety and Community (EHSC) risks by integrating EHSC considerations into our business processes and decision-making. We have a four step management-driven system which includes:



- · Application of EHSC Management Standards to all life phases of an operation;
- An audit and assessment process designed to evaluate operations according to standards, legislation and best management practices in order to identify gaps or weaknesses and determine opportunities for improvement;
- · Planning, decision-making and implementation processes that link to existing business systems; and
- · Management review and improvement appraisals.

#### Our Policies and Standards

Our commitment to sustainability is integrated throughout our company and is embodied in four interrelated documents:

- Charter of Corporate Responsibility—a set of principles related to business ethics, environment, health, safety, and community that governs all operating practices and provides the overarching sustainability governance commitments.
- Code of Sustainable Conduct—outlines our commitments to sustainable development.
- Code of Ethics—sets out the company's dedication to upholding high moral and ethical standards and specifies basic business conduct and behavior.
- Safety and Health Policy—fortifies a corporate commitment to providing leadership and resources for entrenching core values of safety and health.

Together, these documents express our commitment to sustainability and provide a foundation and framework for our EHSC Management Standards—a set of 20 standards that quide all business activities and form an integral part of management decision-making.

### Internal and External Audits

We have worked towards external certification of environmental management systems since 2002, choosing to conform to the internationally recognized ISO 14001 Standard, which requires external verification through audits. As of July 2010, 11 of our operations attained or maintained ISO 14001 certification and all remaining operations are working towards certification.

A corporate EHSC Audit Program exists to conduct internal audits of our EHSC Management Standards and jurisdictional regulatory compliance at all operations on a three-year schedule. Audits and reviews are led by certified auditing professionals. The program ensures that sites operate in accordance with our policies, management standards, permits and other legal requirements. Audit results highlight any material deficiencies or identified

risks which may significantly impact our business activities from a social, safety and environmental responsibility perspective. Operations develop and implement action plans to address each audit finding and progress on action plans are reviewed in mid-term reviews and reported quarterly to CERMC, a senior management committee.

### **Governance and Management Structure**

The Safety and Sustainability Committee (SSC) of the Board of Directors provides policy direction and monitors our environmental, social and safety performance. The Corporate Environment and Risk Management Committee (CERMC) is a senior management committee that, among other things, sets priorities and direction for EHSC programs, tracks performance and measures results.

Reporting to the Senior Vice President of Sustainability and External Affairs:

- · Vice President of Environment, who oversees compliance with environmental standards and regularly reviews performance risks and strategic issues.
- · Vice President of Sustainability, who leads community engagement and activities, relations with Indigenous Peoples, community investment and external reporting.
- · Vice President of Health and Safety Leadership, who provides strategic quidance in the development of a culture of safety, assists with the development of health and safety programs, reviews key performance indicators and assists in the transfer of best practice across the organization.

The three Vice Presidents set goals and objectives approved by the Board of Directors to manage sustainability performance in areas such as water management, biodiversity, community relations, human rights and climate change.

The General Manager at each operation is accountable for site EHSC management systems, conformance and certification to ISO 14001 where applicable, and continual progress towards annual environmental and safety management targets and long-term goals. Each operation is responsible for developing site-specific safety and health and environmental management systems guided by corporate policies.

- 30 More information on our EHSC Management Standards is available in our Sustainability Report and on our ⁴ website.
- 30 More information on External ISO 14001 Certification is available in our Sustainability Report and on our 4 website



## Safety and Health

At Teck safety is more than a priority; it is an unchanging value and an inherent part of who we are. "Everyone Going Home Safe and Healthy Every Day" is our vision and drives our commitment to continuous improvement in safety.

From our first safety and health conference in 2005, to benchmarking best practices across other companies in 2008, to launching and implementing a company-wide Courageous Safety Leadership (CSL) Program in 2009, imbedding safety in our culture has been a progressive journey. 417 See our CSL case study for more details.

### Performance

We use a variety of indicators for our safety performance and saw continued improvement in total recordable injury frequency, lost time injuries and lost time injury frequency from 2008 and 2009. We work continuously to achieve our goal of Zero Incidents. Despite our efforts, we are saddened to report three fatalities at our sites in 2009. Two of these

incidents occurred at the Carmen de Andacollo Hypogene project in Chile and one at the Antamina mine in Peru. We wish to express our heartfelt condolences to the family, friends and colleagues of the deceased.

- 33 More information on Safety Awards that our operations received in 2009 can be found in our Sustainability Report and ৩ website.
- 34 More information on Occupational Health systems, procedures and programs can be found in our Sustainability Report and ৩ website.

### Safety Statistics (1)

|  | 2009   | 2008  | 2007  |
|--|--------|-------|-------|
| Total Recordable Injury Frequency (TRIF) | 1.25   | 1.30  | 2.58  |
| Lost Time Injuries (LTI)                 | 72     | 88    | 158   |
| Lost Time Injury Frequency (LTIF)        | 0.39   | 0.4   | 0.97  |
| Severity                                 | 115.02 | 39.27 | 59.86 |
| Fatalities                               | 3      | 1     | 1     |

<sup>(1)</sup> Safety statistics include employee and contractor performance. Frequencies are based upon every 200,000 hours worked.

<sup>☐ 113</sup> The Glossary in our Sustainability Report and ❤️ website contains definitions of the safety indicators.



Messages and signs throughout our operations remind employees of key concepts taught in Courageous Safety Leadership, such as the sign on this truck, reminding all employees and contractors that they share in the responsibility for their own safety and that of their co-workers.

## ■ Courageous Safety Leadership (CSL): Creating a Culture of Safety at Teck

CSL is a safety philosophy which challenges existing values, beliefs and attitudes towards safety and outlines the changes required to instill a true culture of safety. CSL requires personal leadership and emotional connections to drive the change. The company-wide launch of our CSL Program is a pivotal point in our safety journey.

In 2008 we gathered a group of six people to learn from best practices, meet some of the safest mining companies in the world and determine the keys to their success. Recommendations were then presented to our Senior Executives and Board of Directors and there was strong enthusiasm to move forward with a CSL program.

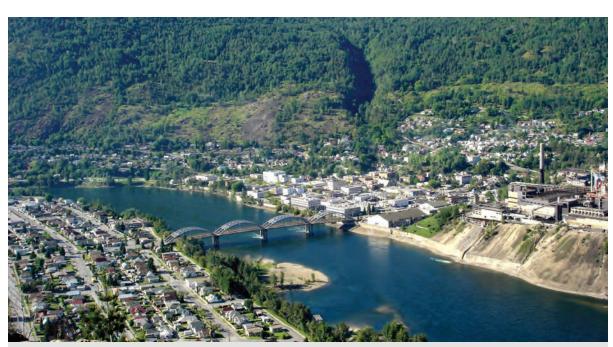
In 2009 many of our Senior Executives and General Managers experienced the intensive one day CSL session, designed to identify where we are in our safety performance and where we could be. Participants explored themes such as the "ripple effect", highlighting how injuries affect many more people than those who are hurt. Benchmarking against leading companies demonstrated that it is possible for us to be safer. The importance of courageous personal leadership in ensuring that safety is a responsibility for each individual was also explored. After experiencing CSL firsthand, there was enthusiasm to move forward with implementing CSL at each operation at Teck. Our commitment to this massive safety initiative during uncertain economic times is a testament to the value we put in safety at Teck.

Now over 10,000 Teck employees and contractors have experienced Phase 1 of the CSL journey – the one day training session. CSL is an on-going process and Phase 2 of the journey includes revisiting the CSL topics through monthly communications with all our operations and offices, presented in team meetings. We harness the power of storytelling, sharing stories of how CSL has impacted each person, both at work and at home. What began as a vision for being safer has turned into a process which has changed the very culture of our organization, influencing the mindset and heart of each employee as they consider what courageous safety leadership means to them. We see a future for Teck where we never have a fatality and everyone goes home safe and healthy every day.



### **SafeStart at Red Dog Operations**

Operating management is responsible for safety performance at each site and often run their own safety programs. At Red Dog Operations we have implemented a Personal Safety Awareness and Skills Training Program called SafeStart. To the left you can see a reminder card which shows the main principles of the SafeStart program which has been implemented.



Trail, British Columbia, the location of our refining and smelting complex.

### ■ Collaboration Leads to a Successful Health and Environment Program at Trail

On May 9, 1988, a Trail, B.C. mother phoned our Manager of Environment to request soil testing. Who could have guessed this call would spark two decades of successful collaboration between our company, community and governments to protect people's health and the environment in the Trail area? Today, the Trail Area Health & Environment Program is still going strong.

As a result of that first phone call, soil lead levels near the Trail smelter were checked and discussions commenced with provincial officials about blood lead levels in local children. A UBC health researcher was contracted to study blood lead levels in children under 6 years old in Trail, revealing an average blood lead level of 13 micrograms per deciliter of blood ( $\mu$ g/dL), compared to 5  $\mu$ g/dL in children of similar age in Vancouver.

Because lead exposure can affect children's intellectual development and behavior, the Trail Community Lead Task Force was formed in 1990, mandated to reduce children's blood lead levels. The Task Force was chaired by the Mayor of Trail with representatives from our company, the United Steelworkers and various environmental groups and provincial and municipal government bodies. Lead exposure pathways were scientifically studied and actions to reduce blood lead levels were developed accordingly.

The Program has achieved significant results. Today, average blood lead levels in Trail children of the same age are around 5  $\mu$ g/dL, meaning that 90% are now below the 'level of concern' of 10  $\mu$ g/dL, as defined by several international organizations. The biggest factor in this success story was the installation of a low emission KIVCET lead smelter in the late 1990s, part of a \$1 billion program of upgrades at the Trail facility instigated by the Task Force.

The Task Force subsequently evolved into the community-led Trail Health & Environment Committee in 2000, which continues to monitor emissions and blood lead levels, while also directing programs supporting Family Health, Home and Garden, Air Quality, Parks and Wildlands and Property Development. We pay the bulk of program costs, amounting to over \$1 million per year. Dr. Nelson Ames, a longtime Committee member, notes that "a lot of trust has been built [among Committee members]" and that "Teck has been a concerned and active participant since the beginning."

Twenty years of success could lead to complacency, but the Committee regularly renews its goals and conducts public consultations. The on-going challenge is to further reduce air emissions and blood lead levels, while retaining public accountability. Teck's representative on the Committee says, "The Trail experience has shown how to directly involve the community in understanding and managing a crucial environmental issue. We owe it to the world to sustain this effective approach."

A group of our employees from CESL Limited, a division that has developed a hydrometallurgical process for the production of copper and/or nickel from sulphide concentrates.



## **Employee Practices**

Our employees are our most important source of energy and innovation and we are committed to engaging them, maintaining a diverse workforce and strong labour and management relations.

### Our Workforce

As of December 31, 2009, there were approximately 8,500 full-time, active employees, including students and temporary employees, working at Teck-operated mining and metallurgical operations and offices. In early 2009,

**37** Please see the case study on the Pend Oreille Operations suspension for an account of our efforts to support employees throughout the transition.

■ 35 A table showing the number of employees at each operation is available in our Sustainability Report and \@ website.

we implemented a global workforce reduction of 825 regular, full-time and temporary positions, as well as 300 contractor jobs. We engaged a career transition service to support employees who were impacted by the workforce reduction, providing counseling, career transition support and assistance with finding new employment.

### Diversity and Equal Opportunity

We support and promote a work environment where individuals are treated with respect, provided with equal opportunities based on merit and kept free from all forms of discrimination. This diversity policy is embedded in our Code of Ethics.

■ 36 To monitor progress in this area, we track the percentage of women in the workforce, the number of Indigenous Peoples in the workforce and the percentage of women in management and governance positions; this data is available in our Sustainability Report and ৩ website.

## Employee Engagement, Retention and Attraction

Our goal is to attract and retain skilled employees in all facets of our business. As part of our efforts to improve employee retention and attraction, professional and career development is a priority, with a focus in four key skill areas: technical, operational, business acumen and leadership.

We provide employees with the training, resources and mentorship required to achieve their goals and objectives. All of our management employees receive regular performance and career development reviews. Building Strength with People (BSWP) is our performance management program, encouraging discussion between employees and supervisors about performance, development and career planning. BSWP has now been successfully implemented in our Chilean operations and offices.

We hire engineering and geology graduates from around the world, offering them comprehensive development programs. We have established Engineer-in-Training (EIT) and Geologist-in-Training programs at most of our operations and a formal program of EIT rotations to various operations is being introduced this year.

We provide leadership and management skills training to our supervisors through several development programs. We continue to offer graduate-level business courses through our Business Education Program, in partnership with Simon Fraser University (SFU). We also have an internal MBA program, in co-operation with SFU, with the first 25 employees working towards graduation in 2011, while continuing to work full-time. In 2007 we developed



Mike Oshaughnessy, Business Planning Manager, receives an Excellence Award from Boyd Payne, Senior Vice President, Coal. Excellence Awards recognize and celebrate the achievements of employees who have made a significant contribution to our company.

### Celebrating Excellence

Our people are our most valuable asset. To recognize their achievements and enhance employee engagement the Teck Excellence Awards Program was initiated in 2007, designed to celebrate employees who embody the values of Teck and have made a significant contribution to the company. We recognize employees throughout the company in the areas of Productivity and Innovation, Safety in the Workplace and Environment and Sustainability. In 2009, the "Unsung Hero" award category was established to provide the opportunity to nominate employees who tirelessly go "above and beyond" the call of duty. Our people and their dedication to our goals are the foundation of our success and we therefore plan to continue rewarding their achievements and contributions.

an Emerging Leader Program (ELP), focused on developing future leaders for key senior positions in the company.

■ 38 More information on our Emerging Leader Program and Scholarship Programs is available in our Sustainability Report and 🖰 website.

associate and join trade unions. Approximately 60% of the workforce is unionized while the balance is covered by individual agreements.

■ 40 For operations with union representation, information on the number and percentage of employees covered by collective bargaining agreements is available in our Sustainability Report or \*\*® website.

### Labour and Management Relations

We fully recognize the rights of employees to freely



Susan Stocker and Suzanne Low represent Teck at our recycling booth, which was featured at an Eco-Fair tradeshow on sustainable business practices and products. Along with 10 other employee volunteers, they explained the importance of mining and electronic recycling to the public during the two day Eco-Fair.

### Picking Low Hanging Sustainability Fruit Around the Office

We have formed a grass-root Sustainability Initiatives Group (SIG) in our Vancouver office to identify and implement "low hanging sustainability fruit" projects that are fast and easy to implement. Starting with a handful of employees, some bright ideas and the support of senior management, the SIG has rapidly implemented some big changes that benefit the environment while engaging our employees.

Some examples of the group's initiatives include the reduction of plastic water bottle usage in our head office, applying sustainability-related procurement criteria when we source our office supplies, being the first out of over 200 companies in our Vancouver office's complex to implement composting, recycling office light bulbs and participating in sustainability-related challenges and fairs. Another one of our main initiatives is to increase the use of social enterprises at Teck. Social enterprises are organizations which imbed social and environmental goals into their business model. Since August 2009 we have created 36 contracts with social enterprises and look forward to continuing our support.

While these initiatives also have a positive sustainability impact, their real value is the opportunity for our employees to become involved and interested in sustainability. This allows us to work towards our goal of creating a culture where employees are encouraged and empowered to look at their decisions through a sustainability lens, instilling a mindset that continuously considers sustainability in everyday actions.

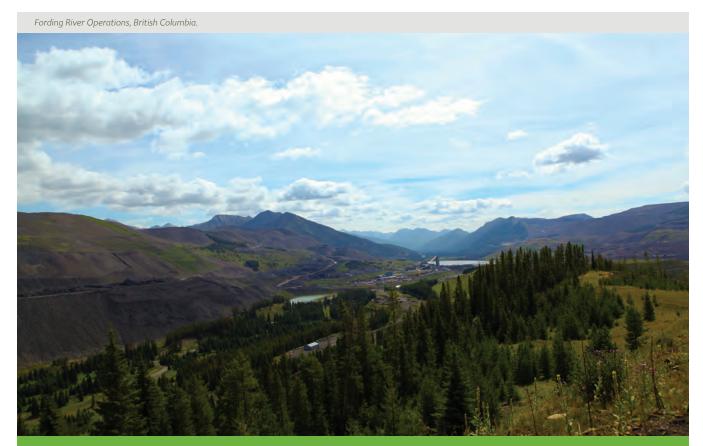
## ■ Human Resources Innovation: A Look at Highland Valley Copper's Modified Work Centre (HVC's MWC)

In 2010 HVC's MWC was one of four finalists in the B.C. Human Resources Management Association's Award of Excellence for innovation. The MWC is a unique disability management program for employees, developed in collaboration with the United Steelworkers Local 7619, as part of a comprehensive claims management program developed in 1992. The MWC's goal is to provide employment and rehabilitation opportunities for staff unable to perform their regular duties as a result of injury or illness.

The MWC provides temporary employment for all employees regardless of the nature of their injury or illness, allowing employees undergoing rehabilitation to contribute and learn new skills by performing tasks that do not require specialized skills. Our General Supervisor of Employee Relations at HVC describes the 6000 square foot MWC as "a very open space where several work stations are set up and each work station is designated for a specific task." MWC employees are able to return to work, receive their base salary, meet their rehabilitation needs and prepare for a successful return to their regular job, reducing absenteeism and promoting early recovery while preserving a skilled workforce.

Sustainability forms an important principle in the MWC. We achieve performance goals at the MWC based on the three "R"s of Reduce, Reuse and Recycle. For example, MWC repairs and refurbishes items such as ladders, shovels, picks and wheelbarrows. When these recycled items are sent back to the department, they are painted bright orange or marked "MWC", allowing employees to recognize their work and feel a sense of pride. The MWC boosts employee morale, is cost-efficient and self-sustaining. Moreover, refurbished items from the MWC generate a dollar value credit for each recycled item. As of December 31, 2009, the total credits accrued to the MWC amounted to approximately \$336,000.

In 2009, a total of 100 employees participated in the MWC, each staying for an average of five weeks, translating to 18,951 hours of productive work and sick leave and disability savings of approximately \$350,000. MWC alumni are usually the biggest ambassadors for the program, along with the Workers' Compensation Board of British Columbia, with whom we developed a DVD about the MWC to serve as a best practice example for the construction industry. We continuously strive to improve the MWC with the aim of making this innovative facility available to our employees well into the future.



## **Environment**

We design and implement effective environmental management systems, efficiently manage our energy and related greenhouse gas emissions, conserve water resources and progressively reclaim disturbed lands to restore the ecosystem.

### **Environmental Management**

We are committed to designing and implementing strong and effective environmental management systems wherever we operate, complying with environmental legislations while mitigating our impacts.

Our overall environmental management practices, structure and systems includes an environmental audit program which helps drive continuous improvement and ensure compliance with environmental regulations. More information on external certification of our environmental management systems to ISO14001 and our corporate audit program is available in the *Internal and External Audits* section **15**.

Operations collect data, monitor performance and report regularly to our corporate office on a wide variety of

environmental parameters including, but not limited to permit compliance, incident information (e.g. spills), air and water quality, energy consumption and GHG emissions, material use and biodiversity programs. Our goal is to operate in compliance with all environmental regulatory requirements and permits as well as voluntary requirements. In 2009 the number of permitted threshold limits being exceeded decreased by 19% compared to 2008, representing the fourth consecutive year in which our performance in this area has improved.

### Spills

Control measures in place to minimize the likelihood of spill events include facility design considerations, meters, alarms, standard operating practices, training and the identification of potential issues through internal and corporate risk

assessments and audits. The majority of spills is confined on-site and immediately controlled, reported and cleaned up. Thorough investigations are conducted to identify root causes, implement remedial measures and prevent future occurrence of similar events. In 2009, there were a total of 225 spills at our operations, of which 86% were under 500L in volume, a significant improvement compared to 287 spills in 2008. During 2009, no long-term consequences to people or the environment resulted from any of these spills and no fines were levied.

### Air Quality

Local air quality can be affected by particulate matter or dust, which is generated by activities such as blasting, trucking, ore crushing and conveyor systems as well as from wind erosion of stockpiles and tailings impoundments. We implement measures to minimize dust from such activities, including adjusting blasting practices when winds are unfavorable, applying sealants to material piles and roadways, using water sprays on roadways and while handling dusty materials, implementing cover systems for trucks, rail cars and ore stockpiles and storing and handling materials in buildings where feasible. Air quality is regularly monitored at all of our operations. In addition, weather stations allow us to determine the relationship between dust levels and winds and precipitation. All of this data is used to assess air quality and identify improvement opportunities.



 $Environmental \ co-op/internship \ students \ collect \ water \ samples \ from \ the \ Fording \ River, \ downstream \ of \ Line \ Creek \ Operations.$ 

## © Community of Interest (CoI) Partnerships in Support of Environment and Health Protection

Our management of sustainability issues has evolved over the past decade in line with regulatory requirements and CoI expectations. As traditional barriers among the mining industry, regulatory bodies, non-governmental organizations and CoIs have faded, "CoI partnerships" have emerged, comprising committees, working groups and task forces. These partnerships are consensus-driven, multi-CoI efforts whose purpose is to bridge gaps between science, policy and community relations. One example of a CoI partnership is provided below.

The Elk Valley Selenium Task Force (EVSTF) was established in 1998 to investigate the potential environmental effects of selenium in the Elk River watershed. The EVSTF comprises representatives from the B.C. Ministries of Environment and the Ministry of Energy, Mines and Petroleum Resources, Environment Canada, Teck and a Secretariat. The EVSTF initiates, assesses and manages studies on the ecological effects of selenium discharges, research and development on selenium treatment and mitigation and communications with Cols, in particular, through annual Selenium Status reports and the EVSTF website. During 2009, work focused on biomonitoring trend studies, selenium geochemical behaviour and modeling, treatment research and the development and establishment of operation-specific thresholds and management triggers.

■ 18 More examples of CoI partnerships and information on selenium management at Teck Coal are available in our Sustainability Report and <sup>1</sup> website.

## **4** Your Concerns, Our Response: Oil Sands

#### What is the issue?

The Alberta oil sands are a significant investable resource base. At present, Teck holds 20% ownership in the Fort Hills Oil Sands project, as well as a 50% interest in two additional oil sands projects, Frontier and Equinox and several oil sands leases. The Fort Hills project is in the feasibility study stage, while all other projects and leases are currently in earlier phases.

The main environmental issues associated with oil sands mining include use of local water resources, sustainability of tailings management strategies and greenhouse gases emissions (GHG) produced by the mining and upgrading process. Reclamation, non-GHG air emissions and land disturbance are also important issues for consideration. A number of Communities of Interest (Cols)—have expressed concern that production of oil from oil sands is inherently irresponsible, or that companies are not operating in a responsible way.

We identified four overarching issues in relation to oil sands development: water management, water quality, tailings management and greenhouse gas emissions.

### What actions have we taken to address the issues?

We participate with other Cols in a variety of partnerships. We are part of the Athabasca Water Management Framework which established guidelines to protect the river's ecosystem and cap the water use allowed for the oil sands mines during low flow periods. We are also evaluating "off-stream" water storage schemes to avoid removing water from the Athabasca River during winter low flow periods. Water would be stored in ponds during high flow periods in summer months when withdrawals from the river are not as critical. We also participate in the Regional Aquatics Monitoring Program which provides independent scientific testing of local waterways upstream and downstream of the oil sands region.

Operating oil sands mines produce fluid tailings, which can take decades to become ready for reclamation. To manage this concern, the Energy Resource Conservation Board recently released Directive 074, which requires that 50% of fluid tailings be captured in dedicated disposal areas after 2013. We are committed to achieving this requirement at our proposed mines so that our tailings impoundments are ready to be reclaimed within five years after active deposition has stopped.

Although there is a perception that oil sands are a dirty source of oil, no oil source is clean. Although oil sands

production emits greater emissions than conventional oil and gas production, when we consider life cycle GHG emissions which include emissions from consumption, the life cycle GHG emission difference drops significantly. Current life cycle GHG emissions from Alberta's oil sands are quite close to other conventional oil sources.¹ Our belief is that the oil sands industry must strive to bring this gap as close to zero as possible. In fact, energy efficiency improvements in oil sands production have reduced the average GHG emissions per barrel of oil from oil sands by 38% since 1990.²

### What is the focus of current and future efforts?

Substantive long-term consultation with our Cols is an essential part of our oil sands strategy. We have identified locally impacted groups and are engaging them in dialogue to ensure that we understand and carefully consider their needs and concerns. This process has been on-going for several years and we anticipate working with our local partners on community engagement throughout each phase of development.

As we move through the exploration and development phase and approach production, we are working hard to ensure that we implement the most effective technology for managing our natural resources. For example, the Fort Hills project is being designed to maximize water recycling and we are currently working to improve our tailings management technologies.

- 42 Information on environmental fines is available in our Sustainability Report and the website.
- 42 A table summarizing significant environmental incidents in 2009 is available in our Sustainability Report and ৩ website.
- 44 A table showing air emissions by type is available in our Sustainability Report and website.

### **Energy and Climate Change**

We are committed to the efficient use of energy and the responsible management of associated greenhouse gas (GHG) emissions.

Energy costs continue to be one of our most significant

operating expenditures and emerging regulatory fees, GHG constraints and carbon costs have prompted us to refine our energy use strategies.

Our energy and carbon management short-term efforts are focused on:

- Enhancing our efforts to identify, assess and implement opportunities to improve energy efficiency, reduce GHG emissions and increase the share of energy derived from renewable sources;
- Investing in research and development of low-carbon technology for mining and smelting;
- Improving processes for monitoring and reporting energy use and GHG emissions;
- Establishing operation-specific energy use and emissions reduction targets; and
- Advancing the use of our products, particularly metals, in applications that result in a net reduction in society's carbon footprint.

Our long-term goal is to achieve a reduction in GHG emissions through energy efficiency improvements, the increased use of renewable energy, fuel switching and if necessary, the use of credits and offsets. We will achieve this challenging goal with ingenuity, creativity and the investment of time and resources.

### **Direct Energy Consumption**

Trends in fuel and electricity consumption for the past four years are shown in Figure 1. In 2009, operations consumed a total of 38,065 terajoules (TJ) of energy, including electricity and fuels, compared to 43,728 TJ<sup>3</sup> in 2008. Over 25% of our

energy consumption is derived from renewable sources, such as hydro electricity.

Figure 1: Energy Consumption (TJ) Company Roll Up

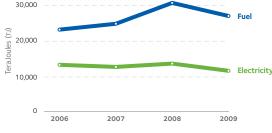


Figure 2 demonstrates the cumulative change in energy use across our operations from 2008 to 2009.

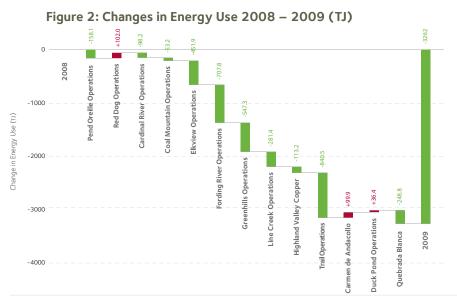
### **Greenhouse Gas Programs and Performance**

Direct GHG emissions from all operations (as  ${\rm CO_2}$  equivalent) were 2,350 kilotonnes (kt) in 2009 compared to 2,649 kt<sup>4</sup> in 2008, as shown in Figure 3.

The cumulative change in direct (Scope 1) GHG emissions across our operations from 2008 to 2009 is shown in Figure 4.

Indirect GHG emissions associated with electricity use for 2009 are estimated to be 104 kt, or less than 5% of our direct emissions. Our indirect emissions are relatively small as many of our operations are in regions obtaining a significant proportion of their electricity from hydro generation, i.e., British Columbia and Newfoundland.

Another aspect of our GHG emission performance is carbon intensity, which is one measure of efficiency based on tonnes of direct CO<sub>2</sub> equivalent emissions per tonne



Note: Green bars represent a net decrease in energy use at an operation, while red bars represent a net increase in energy use at an operation.

 <sup>[3]</sup> Excluding Lennard Shelf, Hemlo, and Pogo Operations, our 2008 energy consumption, including electricity and fuels, was 41,237 TJ.

<sup>[4]</sup> Excluding Lennard Shelf, Hemlo and Pogo Operations, our 2008 direct GHG emissions was 2,556 kt.

Fording River Operations

Greenhills Operations

Greenhills Operations

Red Dog Operations

Coal Mountain Operations

Line Creek Operations

Cardinal River Operations

Carmen de Andacollo

Duck Pond Operations

Pend Oreille Operations

Figure 3: Direct GHG Emissions 2009 (CO<sub>2</sub> equivalent kt)

of product. During 2009, seven of 12 operations saw a slight decrease in their carbon intensities, indicating an improvement in our performance.

It is our intention to develop energy and emissions intensity reduction targets at each of our sites. In 2009 we began this process with Highland Valley Copper and Trail Operations, which both established intensity reduction targets for their major energy inputs.

### Initiatives to Reduce Energy Consumption and GHG Emissions

The key drivers for direct GHG emissions vary significantly by operation. For example, in our coal operations, the coal and natural gas used for the drying of coal product, diesel for mobile equipment and fugitive methane each account for roughly one third of total emissions while the primary source of emissions at Highland Valley Copper, which

- 51 Information on scope 3 GHG emissions, which are a consequence of our activities but occur from sources not owned or controlled by us, is available in our Sustainability Report and
- Information on risks and opportunities related to climate change is available in our Sustainability Report and volumes.
- 53 More examples of our initiatives to reduce energy consumption and GHG emissions are available in our Sustainability Report and % website.

receives electricity from the grid, is the use of diesel for mobile equipment. As such, the opportunities for reducing emissions vary significantly across our operations. Below is one example of an initiative we have implemented at multiple sites to reduce our emissions.

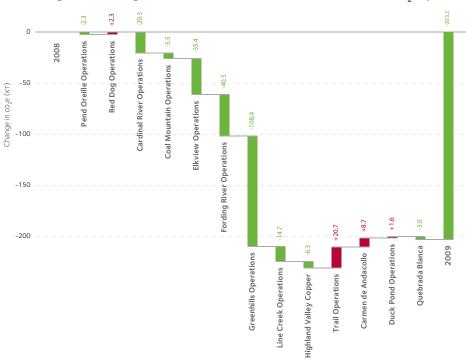
### **Example: Reduced Engine Idling At Multiple Sites**

The use of diesel for vehicles such as large haul trucks and shovels forms a significant component of our energy use and GHG emissions. Efforts to reduce vehicle idling time through awareness programs, mandatory shutoff programs, and the evaluation of engine heaters in cold climates were put into effect in 2009. At Red Dog Operations, we have installed electronic systems on all mobile production heavy equipment to start and stop an engine as needed to maintain engine temperatures and keep batteries charged. In 2009, Line Creek Operations estimated a \$28,000 in savings over one quarter as a result of their reduced idling practices.

Please see our Sustainability Report and hebsite for a variety of examples of our initiatives to reduce energy and GHG emissions.

- 48 Data on carbon intensities, including carbon intensity in product, are available in our Sustainability Report and ৩ website.
- 47 More analysis on our energy use and greenhouse gas performance is available in our Sustainability Report and ৩ website.

Figure 4: Changes in Direct GHG Emissions 2008–2009 (CO, equivalent kt)



Note: Green bars represent a net decrease in energy use at an operation, while red bars represent a net increase in energy use at an operation.

### Regulatory Developments Regarding Climate Change

International and domestic policy efforts are creating incentives for investment in abatement technology and energy efficiency in the private sector by way of emissions control regulations, i.e., Cap and Trade and carbon taxation. Consequently, we anticipate and respond to regulatory risks by investigating site-appropriate projects and through continued engagement with governments on policy development. We continue to assess the consequences of regulatory changes on our business.

### Water

We strategically use water resources and operate to maximize water conservation.

### Water Management

We recognize that water is a precious natural resource that is subject to growing stresses with respect to use and quality. We manage and minimize our impact on water sources, implementing water conservation opportunities where feasible. We fully consider water supplies when planning new projects, including cumulative impacts to surface and groundwater sources. During project planning all viable water use and supply options are considered and designs are developed to minimize water use while maximizing water re-use and recycling. Water sources are

regularly monitored and water quantity and quality data provide the basis for ground and surface water models to determine potential impacts throughout all stages of the mining life cycle. Particular emphasis is given to ground water sources in order to determine rates of drawdown, ensuring the long-term protection of these sources. Forecasts of future availability and use are developed to guide decision making and to ensure aquifers are protected for the benefit of local water users in the future.

### **Water Performance**

In 2009, our total water withdrawal from ground, surface and other sources was just over 119 million cubic metres and nearly the same total quantity was recycled. This represents a reduction of approximately 5% in total water withdrawal as compared to 2008 due primarily to the closure of the Lennard Shelf mine and increased use of recycled water at Highland Valley Copper. Water is extensively recycled throughout all of our industrial processes to minimize the amount of freshwater intake. For example, to minimize the volume of water withdraw Red Dog Operations utilizes the collected precipitation in the processing circuit to the greatest extent possible.

In 2009 we began to develop a corporate water management policy, which we expect to adopt in 2010. To augment this process a water issues and policy workshop was held by our Chilean operations and projects, representing our most water-stressed areas.

# Your Concerns, Our Response: Water Quality Permitting at Red Dog Operations

### What is the issue?

Although Red Dog Operations' water discharge permit was renewed in January 2010, two Non-Governmental Organizations filed an appeal of the permit in February 2010. As a result, the Environmental Protection Agency (EPA) withdrew five of the challenged permit conditions while leaving the remainder of the permit in place. Until the appeals of the 2010 water discharge permit are resolved, Teck will be subject to the applicable limits in its 1998 permit. As previously disclosed, these limits include a limit on total dissolved solids (TDS) which cannot be feasibly met through any existing treatment technology at the volumes being discharged to maintain the facility's water balance.

### What is the background of water quality permitting at Red Dog?

Red Dog Operations' first water discharge permit was issued in 1985 and had no limits for TDS. When this permit expired in 1990 and was subsequently up for renewal, new regulatory standards required "water quality based limits" for TDS and other parameters. These limits were unattainable using existing treatment technology and it was agreed that developing site-specific criterion was the most reasonable solution. The EPA issued a renewed permit in 1998 along with annual compliance orders authorizing discharges of TDS at levels higher than allowed by the permit, while working with Teck and the State of Alaska to develop site-specific TDS water quality standards for Red Dog Creek. Following this arrangement, our water discharge permit was renewed, modified and subsequently appealed by external groups several times since 2003, with the latest appeal occurring in February 2010.

### Are Teck's water discharges harmful to the environment?

We will continue to operate so that our treated water discharge levels do not adversely affect the ecosystem's water quality or the environment. We discharge water in accordance with court-approved interim discharge limits contained in a 2008 settlement agreement, which correspond to limits which were found to be protective of the environment in the Supplemental Environmental Impact Statement (SEIS) for Aqqaluk. Annual biological monitoring studies conducted by the Alaska Department of Fish and Game have not detected any impacts within the stream ecosystem. Sound science studies conducted by the EPA through its SEIS show that the operation is not

harmful to aquatic life. In fact, the watershed ecosystem is more robust than it was pre-mining (Scannell – 2005)<sup>5</sup> because of metals removal and benefits from the increased alkalinity contributed by TDS from the water treatment process. Red Dog Creek, which is downstream of the mine discharge, is healthy and supports productive aquatic life, which was not present before due to the natural toxicity of the creek's water.

### What actions have we taken to manage water quality at Red Dog Operations?

We have consistently worked collaboratively with the EPA, local communities and other Cols to manage water quality at Red Dog Operations, including taking action to treat TDS in effluent and supporting biological studies to monitor ecosystem health and function and potential impacts of TDS levels. We have investigated and implemented measures to reduce the formation of TDS, remove TDS from site water. implement operational upgrades and engage in studies related to TDS treatment and source control. In conjunction with the Alaska Department of Fish and Game, we conduct regular biological monitoring in the creeks downstream from our operation, monitoring the health and productivity of the aquatic system. We were recognized for our work by the Alaska Department of Fish and Game in the 2009 Aggaluk SEIS report. Addressing TDS has been a continuous improvement process at Red Dog Operations and since 1989 a conservative estimate of over \$27 million has been spent on TDS prevention and treatment.

## What effect does the development of the Aqqaluk deposit have on water quality at Red Dog Operations?

Mining Aqqaluk will not affect our ability to continue to maintain a water discharge that protects the environment. We carefully considered the environment, our employees and local communities in deciding to proceed with Aqqaluk. We have the permits and authorizations necessary to develop Aqqaluk and the appeal and five withdrawn conditions of the water discharge permit do not affect the deposit's development.

### What have we learned?

We have learned that engagement with local communities is a must and that outreach and an integrated approach is necessary on matters that can potentially affect a community. We have learned that we should not accept a permit that contains limits that are unattainable. Rather the approach should be to work diligently with the governing agency and develop concrete solutions to permit challenges.

### What is the focus of future efforts?

We remain committed to working with the State of Alaska,

the EPA and other local regulatory agencies and Cols as we move forward.

□ 41 For more information on issues related to water, see the discussion in *Your Concerns, Our Response: Carmen de Andacollo Water Strategy.* 

### Biodiversity and Ecosystem Impacts

We progressively reclaim disturbed lands throughout the mining life cycle, conserving biodiversity, restoring the ecosystem and creating positive legacies.

We strive to be a responsible steward of the lands that we manage. Our aim is to minimize our impacts, protect and enhance wildlife habitat and leave behind land that will support productive uses for future generations once our mining operations have ceased.

### **Biodiversity**

We integrate biodiversity conservation considerations through all stages of the mining life cycle, mitigating known and identified biodiversity impacts. Characteristics underpinning the long-term health of the natural environment are identified, analyzed and evaluated prior to any disturbance. When rare or scarce natural resources are identified, relevant areas may be avoided, mitigation plans put into place, or efforts undertaken to offset the disturbance by conserving resources elsewhere in the vicinity of our operations. We incorporate biodiversity management principles and activities into our operations, such as the appropriate selection of site-appropriate native, indigenous tree and shrub species for planting during reclamation. This allows for the protection of valued ecosystem components and the creation of wildlife habitats necessary for future ecosystem integrity.

In 2009 we added biodiversity-specific policies in our Environment, Health, Safety and Community Management Standards and finalized a biodiversity guidance manual to support operations in their implementation of biodiversity protection and conservation practices. As our biodiversity practices become more formalized, operation-specific biodiversity management plans are being developed and used across the company.

### Example: Elkview Operations' Biodiversity Strategy

Specific activities related to Elkview Operations' biodiversity strategy include:

• Development of diverse wildlife habitat areas (e.g.,

- rock and woody debris pile, planted snags, native trees and shrubs);
- Progressive reclamation using the most recent research and techniques (e.g., bioengineering, rough surface site preparation treatment);
- Annual winter wildlife surveys and trail cameras used to document and manage a variety of wildlife species;
- Participation in a regional Bighorn sheep radiocollaring study;
- · Aerial seeding of high wall benches;
- Development of a wildlife tracking database to monitor rare and/or unusual wildlife sightings and reported wildlife mortalities; and
- Avoiding/protecting sensitive environments for certain species (e.g., Great Blue Heron Rookery at Goddard Marsh).

#### **Land Status**

Our practice is to progressively reclaim lands during operations, once those lands are no longer required for mining. The long-term goal of reclamation is to re-establish previously-existing land uses on a property-average basis, resulting in a biologically-diverse, self-sustaining, ecosystem and vegetation mosaic compatible with end land use objectives.

At the closure stage, we conduct the following activities to return the remaining disturbed land to a stable state for post–mining land uses:

- Remove, relocate, demolish or transfer ownership of buildings and physical infrastructure;
- · Close pits and shafts;
- Open pits;
- Stabilize underground workings;
- · Treat tailings and waste water appropriately; and
- Slope, contour, cap or cover and vegetate our waste rock dumps and tailings impoundments.

Approximately one-third of the lands that we have disturbed have been progressively reclaimed. During 2009 alone, we reclaimed 214 hectares of land.

- 56 More examples of operation-specific biodiversity activities are available in our Sustainability Report and <sup>1</sup> website.
- 56 Information on our conservation partnerships is available in our Sustainability Report and ® website.



A moose explores the land at one of our reclaimed areas

## ■ Geographic Information System (GIS) Wildlife Tracking Database at Elkview Operations

Recognizing the need to better understand the species present on the property and the types of natural and reclaimed habitats used by those species, Elkview Operations developed a GIS Wildlife Tracking Database in April 2009. The database facilitates accurate and efficient data collection, replacing an observation card based reporting system with no links to GIS. The database was primarily designed to document rare, unusual and mortality sightings. Species of special interest include grizzly bear, black bear, cougar, wolf, badger, moose and Bighorn sheep. The database stores information on each sighting such as sex, number of animals within the group, age class, geographical description, cause of death (if applicable), observer and additional comments. The database also records the location of significant habitat features including bear rub trees, mineral licks, wallows, dens and nests and has recently incorporated the location of wildlife monitoring motion detection cameras.

Overall, the database has raised employee environmental awareness on the property through participation and communication. Since its inception, a total of 142 wildlife sightings have been reported and recorded, along with 19 identified habitat features. For example, our GIS system has raised awareness of a Great Blue Heron rookery in Goddard Marsh and we strive to limit our activities in the area during the Great Blue Heron's breeding and nesting periods. The permanent record of habitat features allows mine planners and environmental staff to avoid or mitigate the loss of these features and in some cases plan for them to be duplicated in future reclamation projects. Another example of the database's value is the data gathered on Bighorn sheep locations. As Bighorn sheep sightings in proximity to the property become more frequent, the data we gather will help us incorporate critical sheep escape and foraging habitats in our mine reclamation plans. Our GIS system helps us efficiently maintain the natural habitat and biodiversity of the lands that we operate in.

Up to 170 tonnes of steel-making coal is required to produce the steel used to build a typical wind turbine. We made our first investment in wind energy in 2010, partnering with Suncor in a Joint Venture agreement to develop the Wintering Hills wind power project.



## **Product Stewardship**

We are responsible stewards of the products we produce and the materials we manage, continuously improving the amount of materials recycled and assessing the safety and sustainability of our products.

Our approach to product stewardship is directed by our Product Stewardship Committee (PSC). The PSC reviews new applications, uses and potential sales jurisdictions for our products. Transportation and handling, packaging and labeling and life cycle stewardship aspects are assessed. The PSC is a cross-functional team, applying risk management principles to provide guidance and direction on new products and conduct reviews aimed at assessing the safety and sustainability of our products.

## Health and Safety Aspects of our Products

Health and safety aspects of our products comply with regulations and voluntary codes and are assessed throughout the product life cycle stages, from concept development through to research and development, production, marketing, storage and distribution, product use and disposal, reuse or recycling. In 2009, we fully complied with all safety and health regulatory codes related to the use of our products with one minor exception (a labeling deficiency by one of our contractors who repackages cupric sulphate).

### Materials Stewardship

We are committed to the responsible management of materials. The vast majority of our products are

- 58 Information on product labeling, marketing and communications is available in our Sustainability Report and ৩ website.
- 59 Information on hazardous and nonhazardous wastes is available in our Sustainability Report and ৩ website.

commodities such as concentrates, coal and metals that are sold in bulk rather than in packages. For those that are sold in packages most are 100% recycled. Our major products – steelmaking coal, copper and zinc – are essential for a more sustainable future. We collaborate with the

International Zinc Association to use zinc to help eradicate zinc deficiency and this is highlighted in the case study below entitled, A Sustainable Solution to Zinc Deficiency.



Greg Brouwer, Director of the Zinc Nutrient Initiative and Dr. Andrew Green, Director of Environment and Sustainability at the International Zinc Association, discuss the importance of zinc fertilizers with fertilizer retailers in rural India.

### **a** A Sustainable Solution to Zinc Deficiency

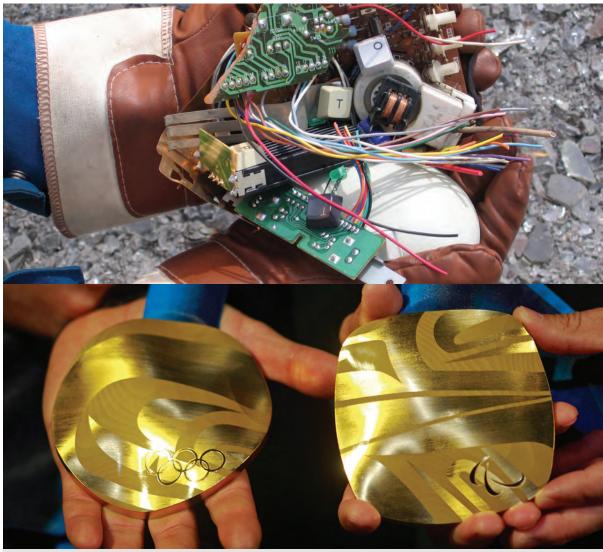
Zinc is required in trace quantities in the human diet, essential to many aspects of our health, including growth, skin, eyesight, bones, digestion, reproduction and the immune system. One-third of the world's population is estimated to be at risk of zinc deficiency and the related disorders result in the deaths of up to 800,000 people annually. Children in the developing world are particularly vulnerable and almost 450,000 children under the age of five die each year as a consequence.

As a major producer of zinc and an active member of the International Zinc Association (IZA), we are helping to implement a sustainable solution to the problem of zinc deficiency. Our President and CEO and current IZA Chairman Don Lindsay has encouraged and promoted the IZA's long-term strategy of combating zinc deficiency through the use of zinc fertilizers to improve the yield and nutritional status of crops, coupled with a short-term strategy of providing zinc supplements to those most in need.

One of our employees, Greg Brouwer, is currently seconded to the IZA as Director of the Zinc Nutrient Initiative. According to Brouwer the initiative's goal of promoting the use of zinc fertilizers is a sustainable solution because, "farmers benefit from the increased crop yields, governments benefit from enhanced food security, zinc producers benefit from an expanded market and people benefit from improved human health, which will in turn save hundreds of thousands of lives."

In order to promote increased use of zinc fertilizers, engagement with a wide variety of Communities of Interest (Cols) is required, including farmers, fertilizer producers, distributors and government agencies. Collaboration among these Cols is essential for the success of the initiative, one example being government agricultural subsidization to encourage the use of zinc fertilizers.

To help address zinc deficiency in the short-term, the IZA has partnered with UNICEF to develop the Zinc Saves Kids (ZSK) initiative. ZSK focuses upon fundraising for global UNICEF programs providing zinc supplements for children. We kicked off the ZSK fundraising campaign with a \$1.66 million donation in January 2010.



The top photo shows electronic waste, consisting of end-of-life electronics such as computers and keyboards. The bottom photo shows the Olympic and Paralympic Gold Medals used in the 2010 Winter Games, each containing some recycled metals from electronic waste.

## From Recycled Electronic Waste to Symbols of Excellence

Recycling metals is an important aspect of our commitment to responsible materials stewardship. We were proud to be the exclusive supplier of metals used in the production of over 1000 medals which were awarded at the Vancouver 2010 Olympic and Paralympic Winter Games. Traditionally metals for Olympic medals were sourced entirely from mined resources, but we became the first metal supplier in history to include metals recovered from e-waste, which is end-of-life electronic waste such as computers and keyboards, in the Olympic medals.

Our smelter and refinery in Trail, B.C. has been recycling e-waste since 2006, diverting it from many landfills. Trail developed an e-waste recycling process which maximizes metal recovery. Metals are recovered from cathode ray tube glass, computer parts and circuit boards through separation, segregation and smelting. In order to maximize metal recycling, some components such as circuit boards and aluminum are separated and sent to specialty refiners. To maximize recycling efficiency, we sent some of our e-waste to Umicore facilities in Belgium for processing metals that were then used in the Olympic medals. We are committed to resource efficiency and recycling and believed that it was important to have recycled metals in every medal of the 2010 Olympic Games.

Over the past four years Trail has processed over 27,000 tonnes of e-waste and we expect Trail to process up to 15,000 tonnes of e-waste per year. As Christa Ford, Business Development Chemist from Trail says, "By diverting recyclable materials from the landfill, we can extend the life of our natural resources by using what we have already mined once." Every tonne of recycled electronics reduces waste, decreases the need for new landfills and saves energy that would be needed to generate mined resources. Recycling e-waste and turning them into Olympic medals that are symbols of excellence is one step in our journey towards sustainability at Teck. Team Teck Olympic Athlete Kelly VanderBeek said, "Teck's foresight with the metals and medal connection was perfect - this metal that may have ended up in a landfill will now be cherished for all time."

Below is a local shop near the community of Carmen de Andacollo where we have provided business development grants to assist local entrepreneurs and promote economic development.



# **Economic Development**

We build strong governance systems and work with Communities of Interest and host governments to create sustainable benefits from our operations for present and future generations.

#### **Land Use and Access**

We engage with Communities of Interest (CoIs) early in the exploration cycle.

During exploration, the first stage of the mining life cycle, we may explore where people are living or in an area that they are actively using or have tenure rights. Because our presence has an impact on people who live near our exploration activities, we developed an Exploration Toolkit to train our exploration staff in a consistent approach to managing social issues. The toolkit provides practical guidance on how to approach Cols during exploration, drawing on the collection of tools and guidelines from the Social Management and Responsibility Toolkit (SMART). Our geologists will be trained in the Exploration Toolkit in 2010 and 2011. Additionally in 2010, we provided our North American and Australian geologists with training in

people-centered development and dialogue as well as in working with Indigenous Peoples.

# Business Ethics and Governance

We build sound governance systems, protecting the interests of our Communities of Interest and ensuring good management and ethical decision making.

#### **Anti-Corruption**

We continue to support the Extractive Industry
Transparency Initiative (EITI) which aims to improve
transparency and accountability in the extractives sector.
Our Code of Ethics outlines our dedication to high moral
and ethical standards and specifies business conduct
and behavior. One hundred percent of our Canadian and

American non-hourly, non-union staff have been trained in our Code of Ethics, except for Duck Pond Operations employees which had technical issues with the online training but still certified compliance with the Code of Ethics in 2009. We also assess the risk level for numerous fraud scenarios annually. Our internal audit team tests the effectiveness of internal controls that have been mapped to applicable fraud scenarios. Ninety five percent of our business units have been analyzed for risks related to corruption and there were no incidents of corruption identified in 2009.

■ 61 A detailed Global Reporting Initiative Governance Indicator Table provides more information on our governance structure and procedures. It is available in our Sustainability Report and <sup>1</sup>0 website.

# Distribution of Economic Costs and Benefits

We create opportunities for long-term, sustainable economic development.

#### **Economic Performance and Contributions**

Our presence is often a source of significant economic development for many of our Communities of Interest (Cols). We contribute to our Cols wealth and prosperity through tax and royalty payments, direct and indirect employment and the creation of broader economic opportunities. In 2009 our Economic Value Generated, Distributed and Retained was \$3.419 billion, as defined by the Global Reporting Initiative.

☐ 66 Tables showing detail on Economic Value Generated, Distributed and Retained and Income and Resource Taxes Paid by Country are available in our Sustainability Report or ৩0 website.

#### **Procurement and Local Hiring**

We support local communities and their sustainable development through measures such as locally sourcing goods and services and employing area residents. By maximizing local purchasing and local employment whenever possible, we bring benefits to local communities. This policy helps us gain community support, facilitating access to the resources. We have developed a guideline

on local employment and sourcing of goods and services to facilitate local access as part of our Social Management and Responsibility Toolkit.

■ 68 A table showing Percentage of Spending on Locally-Based Suppliers is available in our Sustainability Report or <sup>1</sup> website.

#### **Closure Planning**

All operations have closure or reclamation plans developed in accordance with local legislation and may be informed by international guidance such as the International Council on Mining and Metals (ICMM) Mine Closure Toolkit. We strive to increase social considerations in our mine closure planning and will share best practices from our past experiences throughout our organization.

In response to the volatility in the global economy in 2009 and the decline in commodity prices, our operations adjusted by controlling costs and optimizing operational efficiencies. Despite our efforts, Pend Oreille Operations was suspended indefinitely in February 2009.

- © 37 More information on how Pend Oreille Operations worked with the community during the suspension can be found in the Pend Oreille case study.



Pend Oreille Operations, Washington State.

### A Partnership Built on Trust at Pend Oreille Operations

Our relationship with our employees and neighbouring communities at Pend Oreille Operations is characterized by trust and mutual goodwill. As a result, when operations were suspended indefinitely in February 2009, 225 miners, mill-workers, technicians and assistants consistently met production quotas and operated without a single loss-time incident during their 60 day notice period. Their loyalty provides a testament to our partnership and demonstrates the value of engagement with employees and the community.

When we acquired Pend Oreille Operations in 1996, we based our approach on one simple idea – "If I lived here, what would I expect a mining company to do?" We focused on closely aligning the needs of the company and the community, one example being the provision of a mutually beneficial ambulance. We supported the establishment of the Selkirk Community Cominco Planners, a forum providing dialogue on community goals, post-mining aspirations and our planning processes. When the mine reopened in 2004, we maintained our community dialogue through regular updates from our General Manager in the local newspaper. We also became an active member of the community, providing financial support and encouraging employees to participate in local community organizations.

When global economic conditions forced suspension of operations at the mine, General Manager Mark Brown personally met with each work crew to explain the situation. Severance, including benefits, was provided to all employees along with job placement assistance. An office was provided during the weeks prior to the layoff so that State employment officers could meet and develop future plans with over 170 employees. We applied for Trade Adjustment Assistance on behalf of employees, allowing for improved benefits and retraining for those laid off. On the day of the announcement, employee assistance counseling was available and employees were sent home so that they could personally inform their families. A visiting academic from the University of Queensland noted feedback from the community stating that we were, "always respectful of the town" and "never once did we feel abandoned by Teck." The community's response to the mine's suspension was one of sadness, not anger.

There are many salient lessons in the story of Pend Oreille. We listened and empowered rather than commanded, seeking partnership, transparency and respect at all times. However, with hindsight greater efforts could have been made to engage the community with mine closure planning. Moving forward, we are currently undertaking exploration activities and working with the State of Washington to develop reclamation plans for the mine's tailings basins. We will work with the community to determine beneficial land uses, building on our existing community partnership.

We delivered an educational presentation on the geology of the oil sands region to the Athabasca Delta Community School and the community at large, in collaboration with SilverBirch Energy Corporation.



# Society

We value engagement with Communities of Interest. We strive to manage social issues, involve people affected by our activities, respect human rights and Indigenous Peoples and promote sustainable community development.

## **Social Management**

We design and implement strong social management systems, identifying, managing and mitigating social risks while capitalizing on opportunities.

There is a "social" or "community relations" dimension to all our activities. Whether we are exploring a potential area, designing a new project, constructing a road, expanding an existing mine or rehabilitating a closed facility, our presence has an impact on the people who live in and use the affected area. Social impacts are defined as positive or adverse consequences experienced by our Communities of Interest (Cols) as a result of the existence of a project or operation. Social performance is about managing our social impacts and our relationships with Cols.

Social baseline studies and assessments allow us to

understand social issues, with the identification and management of issues beginning in exploration and continuing to project closure. We identify and manage social impacts as a key component of our risk assessment, decision making and project development. Fundamental at every stage of social assessment is CoI engagement and participation to ensure studies and programs are based on accurate data and result in meaningful and realistic outcomes.

In 2009 we adopted two new Management Standards, one on Communities and Indigenous Peoples and another on Human Rights. They set out our responsibilities and provide guidance on how we conduct our business in an ethical manner which is respectful of communities and Indigenous Peoples and supportive of fundamental human rights. In 2010 and 2011 we will effectively disseminate the standards across the company, enabling business functions

to conduct a gap analysis of their existing practice and formulate action plans to improve performance where required.

We have continued to build internal capacity and professional competence, developing guidance tools to translate our requirements into practical steps. Since 2009, we have been developing SMART, a Social Management and Responsibility Toolkit which provides guidelines to manage social risk and performance. SMART covers topics such as developing community profiles, conducting social impact assessments and implementing social management plans.

We continued our dialogue training throughout 2009 and 2010. The training is delivered by the Center for Social Response, an Australian non-profit organization that delivers training focused on building a people-centered approach to engagement and dialogue with Cols. In total, dialogue training has been completed by over 130 people across the company, creating a common language and improved ways to integrate social performance into our business.

- ☐ 14 See the *Our Management Systems* section for more information on our Environment, Health, Safety and Community Management Standards.
- (a) 39 More information on SMART can be found in the case study below.
- ☐ 71 More information on dialogue training is available ⁴ online in our 2008 case study entitled Q&A With Centre For Social Response Trainer Tony Kelly.



Communities of Interest can share their questions, concerns, or issues through this feedback box, located at Carmen de Andacollo. SMART has many tools, including a Grievance Mechanism Tool.

## SMART, the Social Management and Responsibility Toolkit

#### What is SMART?

We have developed the Social Management and Responsibility Toolkit (SMART), which is a set of tools and guidelines to help us manage social risks and monitor social performance. SMART's tools are relevant across the project life cycle in five key areas: social risk management, engagement, social impact assessments, community investment and local content. In addition, guidance documents on themes such as human rights, gender, Indigenous Peoples, resettlement and local conflict are being developed. Our first full set of tools should be available by the end of 2011. SMART Training for our exploration groups, projects and operations teams will commence in September 2010.

#### What is SMART- Exploration?

SMART-Exploration is a toolkit especially for exploration which covers each stage of the exploration life cycle, providing practical guidance and checklists for geoscientists and support staff on how to approach and manage relationships with communities, including indigenous groups. The toolkit is currently being piloted by our exploration group in North America.

#### Why are we developing SMART now?

Unmanaged social issues pose a major risk to our business and result in lost opportunity. Many resource companies have been faced with multi-million dollar project delays as a result of issues raised by Communities of Interest. Moreover, financial institutions, shareholders and investors increasingly view social performance as key criteria in their financial decision making. We therefore recognize the need to understand and manage these risks and opportunities as professionally as possible.

## **Indigenous Peoples**

#### We respect the rights of Indigenous Peoples.

Indigenous Peoples are an integral part of some of the communities in which our activities take place and we are committed to transparent consultation, open dialogue and engagement with them. We believe it is important to develop long-lasting, mutually beneficial relationships with Indigenous Peoples that contribute to their aspirations, while allowing us to meet our strategic goals. We recognize that Indigenous Peoples and communities have unique interests and concerns related to development and are committed to ensuring that consultation fosters respect for their legal rights and aspirations, including the pursuit of their social, economic, cultural and environmental well-being.

#### **Working with Indigenous Peoples**

We have been developing guidelines on working with Indigenous Peoples in SMART. These guidelines identify opportunities for us to develop successful relationships with Indigenous Peoples, providing guidance on areas including dialogue, internal understanding and awareness, managing impacts, employment and contracting, resource revenue sharing and agreements. Our standard practice aligns with all applicable international standards, including the International Labour Organization's ILO-169 (Indigenous and Tribal Peoples Convention), which Chile ratified in 2009. ILO-169 has implications for the mining sector in Chile and the way in which indigenous interests and participation are considered. In 2010 we will facilitate the exchange of experiences and lessons learned from our staff in North America to our Chilean colleagues.

Indigenous groups are an essential partner in our exploration work and this year our exploration groups in North America and Australia undertook training on working with Indigenous Peoples. Creating transparent relationships in these very early stages is crucial to our long-term success and we plan to continue this training in other relevant areas such as Chile.

In 2009, eight of our operations were within or adjacent to Indigenous and Aboriginal Peoples' traditional territories. These include the six Teck Coal Operations, Highland Valley Copper and Red Dog Operations. We consult and accommodate the interests of Aboriginal Groups within whose traditional territories we are operating. Formal agreements are in place or are currently being negotiated for all these properties, one example being the Memorandum of Understanding between Cardinal River Operations and the Alexis Nakota Sioux Nation which includes terms for economic development.

Detailed information about the agreements in place with indigenous groups near our operations can be found in our Sustainability Report or website.

#### **Indigenous Employment and Contracting**

We engage indigenous communities regarding employment and contracting, notifying them of opportunities and creating and monitoring employment and contracting targets.

The available data on the number and percentage of Indigenous Peoples in the workforce is in our . 75

Sustainability Report or on our . website. Indigenous employment and contracting information is not always available because in many jurisdictions it is illegal to inquire about an employee's ethnicity due to privacy or other reasons. We are working towards tracking this indicator more carefully through self-identification and will improve our reporting on this in the future.

# **Involving People Affected By Our Activities**

## We engage honestly and transparently with our Communities of Interest (CoIs).

Engagement is a process of developing and deepening the relationship and trust between operations/projects and Cols through meaningful interaction and dialogue. Engagement involves disclosing accurate information that has been understood by Cols, engaging Cols in dialogue and gathering information from them and involving them, as far as practical, in decision making around the operation/

- 77 Information on emergency preparedness and incidents which required the activation of emergency preparedness procedures is available in our Sustainability Report or 🖰 website.
- ☐ 78 Information on our pandemic plan is available in our Sustainability Report or <sup>1</sup> website.
- ☐ 76 There were no resettlements in 2009. Information on how we manage resettlements is available in our Sustainability Report or <sup>®</sup> website.
- ☐ 76 Carmen de Andacollo is our only operation where artisanal miners are active within and adjacent to our operation. Information on artisanal mining is available in our Sustainability Report or ৩ website.

project. The engagement process should always be taken in a timely, respectful and culturally-appropriate manner.

Currently, all operations and projects are involved in engagement with Cols. We continue to develop a more robust social management program which involves capacity building and the use of tools such as SMART.

#### Community Grievance Mechanisms and Procedures

A Grievance Mechanism, sometimes known as a Feedback Mechanism or a Complaints Process, is a process which allows us to receive and effectively organize our response to feedback from Cols on matters of interest to them related to our operation/project. These may be questions, issues, ideas, concerns or complaints. It provides Cols with an alternative way of communicating with us, anonymously if necessary and ensures that communications receive a suitable response within an appropriate timeframe. Implementing these mechanisms will help us meet international standards, identify risks early and monitor them, be transparent and consistent and minimize conflict.

In 2009 our operations started to develop and implement Grievance Mechanisms with a goal to have them active by the end of 2010.

■ 77 More information on grievances at our operations is available in our Sustainability Report or \$\forall \text{ website.}

The commitment of Teck and the community of Pan de Azucar to work together towards sustainable development is illustrated in this local sign.



Your Concerns, Our Response: Carmen De Andacollo Water Strategy

#### What is the issue?

We acquired Carmen de Andacollo (CDA) in Chile and the

associated Hypogene expansion project in 2007. This expansion will triple the mining output of CDA, but has caused friction with the local community over water issues, as water is a scarce resource in this water-stressed region. We have learned valuable lessons about the importance of on-going dialogue and engagement with our local partners and community members as a consequence.

The original environmental approval application for the Hypogene Project was approved in 2007 and called for water to be supplied from Quebrada de Talco wells. However, a late amendment to the application by the former owners changed the water source from Quebrada de Talco to the El Culebron aquifer. The water source change was made without adequate community involvement, resulting in many community members feeling excluded from the process and expressing their feelings in negative media reports and public protests. In response, the local government stopped pending environmental permits for CDA, farmers in the area initiated legal action against CDA and local CoIs staged a protest. CoIs feared that the additional strain on the El Culebron aquifer would have a negative impact on the quantity and quality of the water and could leave as many as 30,000 people without clean drinking water. It was not required by legislation to consult Cols for an amendment of this kind and the previous owner of CDA chose not to do this. When we acquired CDA, we inherited this decision.

## What actions have been taken to address the issue?

As soon as we knew there was a problem we publicly apologized and sought to engage our Cols, gain an understanding of their concerns and find new solutions. As a result, we established a third option for the Hypogene project water supply, specifically the construction of a 27 km pipeline to extract water from the Lower Elqui aquifer. Under this alternative plan, the Hypogene project would use El Culebron water for 18 months, but once the new pipeline was in place, the Lower Elqui aquifer would satisfy our water needs for the remaining 19.5 years of mine life.

We worked with the local multi-CoI water group to develop an early alert plan to anticipate and prevent negative impacts from water extraction and establish a water monitoring program. We also agreed to exchange our current extracted El Culebron water with the water supply of the local drinking water company because the water from our aquifer was of higher quality and would be more beneficial to the community by providing higher quality drinking water.

#### What is the focus of current and future efforts?

Effective water management is critical at all of our

operations and our commitment to the issue is long-term. We are working to establish a fund to improve existing canals and implement advanced irrigation technology, leveraging an existing government program. We will maintain our participation in the multi-Col water group, performing monitoring duties, training other participants and collaborating with the community on water planning, while maintaining open lines of communication and transparency.

The CDA water strategy taught us a valuable lesson in the importance of engagement with Cols. We recognized the need to adopt a rights-based, multi-disciplinary approach to water, rather than viewing it as a commodity. We also realized the importance of an approach to water risk identification and management that considers not only financial or engineering considerations, but also social, environmental, cultural, human rights and economic considerations for all users. Most importantly, we understood that there must be more Col engagement, more transparency and more open lines of communication. We developed policies that will help us identify issues and opportunities early on and keep Cols involved in collaboratively looking for ways to maximize the benefits and mitigate any adverse impacts of our activities. As one member of the CoI water group expressed, "doing things wrong has led to doing many things right." We aspire to keep doing the right thing.

# Sustainable Community Development

We support the communities that we live and operate in and build community partnerships. We are moving towards more strategic community investment.

#### **Community Investment**

We define community investment (CI) as a voluntary contribution, beyond the scope of our normal business operations, intended to benefit local communities. Our approach to community investment is rooted in the strategic overlap between three key areas:

- CI directly linked to fundamental business needs, such as maintaining a social license to operate and improving our reputation and project legacy;
- CI aligned to mitigate specific social risks faced by the operation/project; and
- CI strategically empowering Communities of Interest (Cols) to achieve their long-term development goals.

When based on these three areas, CI has the potential to

be a very valuable results-based investment for both our company and the communities affected by our operations.

As a United Nations Global Compact participating company, the United Nations Millennium Development Goals are central to our community investment decision making. We focus our community investment in development aimed at poverty alleviation, including programs creating access to clean water, improving nutrition, supporting education and facilitating economic development. We may also invest in local infrastructure when our operations are found in remote locations where roads, community facilities and other facilities related to health and well-being may not be present.

#### **Corporate Community Giving**

Corporate community giving includes charitable donations to numerous organizations in the communities in which we operate worldwide. In mid-2009, we announced our intention to honour prior corporate community giving commitments, despite the global economic downturn. In 2009 we provided support to numerous organizations, including but not limited to the St. Paul's Hospital Foundation, the Nature Conservancy of Canada and the United Way. We also respond to global disasters which require humanitarian aid, matching employee donations towards relief for the 2010 earthquakes in Haiti and Chile. One of our primary partnerships in British Columbia is the B.C. Children's Hospital Foundation. We are one of three founding members of the Mining for Miracles Campaign supporting the B.C. Children's Hospital. The program has been running for over 20 years and has raised approximately \$14 million, with our company and employees directly contributing over \$5.5 million.

Association's fertilizer and zinc supplementation program to address zinc deficiency in children is one example of corporate community giving which is aligned with the United Nations Millennium Development Goals. See the case study entitled A Sustainable Solution to Zinc Deficiency for details.

#### **Performance**

Community investments and corporate community giving in 2009 totaled \$16 million. We maintained our goal of donating 1% of annual earnings before interest and taxes (EBIT) on a five-year rolling average basis. A table showing

total community investment and corporate community giving by operation from 2006 – 2009 is available in our **2006** 90 Sustainability Report or on our **30** website. In the future infrastructure investments and associated potential impacts will be tracked with more detail at the local level as part of community investments.

#### **Moving Forward**

We are moving towards more strategic community investment which is aligned, multi-CoI-driven, sustainable and measureable. This will be a multi-year project for us beginning with the revision of our Community Investment Policy, guidance and capacity building at our operations through SMART tools and training, the introduction of staff dedicated to community development and investment and changes in reporting to better reflect impacts, value and change.

## **Human Rights**

We respect human rights and support the protection of internationally proclaimed human rights standards.

We respect human rights and manage human rights risks, which have the potential to impact our projects, our reputation and our relationship with Communities of Interest (Cols). We recognize that proactively fulfilling our responsibility to human rights, from our workplace to our communities and out to our supply chain, is complex and challenging. In 2007 we first formalized our commitment to human rights by joining the United Nations Global Compact (UNGC) which is a voluntary leadership initiative that seeks to align businesses with ten universally accepted principles, including areas such as human rights, labour and anti-corruption. In 2009 we created a new Human Rights Management Standard, which provides guidance on conducting business in a manner that supports the fundamental principles of human rights. We support the protection of internationally proclaimed human rights and adhere to the principles set out in the United Nations (UN) Universal Declaration of Human Rights, the Voluntary Principles on Security and Human Rights, the UNGC, our Code of Sustainable Conduct and our Code of Ethics.

In 2009 we conducted a strategic review of our human rights practices with the goal of enhancing our management systems and practices on human rights issues. We have developed human rights guidance, requirements for grievance mechanisms, an internal Indigenous Affairs Working Group and integration of human rights risk and impact assessments to new projects. In April 2010, Business for Social Responsibility provided an assessment of our human rights management against our own standards, leading best practice and the UN Special Representative on Business and Human Rights

framework. The review showed us that we are improving in our management of human rights impacts, our integration of human rights into the company and our performance measurement.

#### Non-discrimination

In accordance with our Code of Ethics, we support and promote a work environment where individuals are treated with respect, provided with equal opportunity based on merit and kept free from all forms of discrimination.

Employees are entitled to freedom from sexual and all other forms of personal harassment. Our Anti-Harassment Policy clearly defines these rights and outlines the procedures governing the associated complaint process.

We have a toll-free 24-hour Whistleblower Hotline administered by an independent company to provide an anonymous mechanism for reporting violations. Incidents are managed in accordance with our complaints processes. In 2009 there were four incidents in which allegations of discrimination were reported.

#### **Security Practices**

Where security personnel are required, we ensure that they have training and apply the Voluntary Principles on Security and Human Rights. Periodic reviews are conducted.

In Canada, where employees generally perform security duties as part of their other duties, many are aware of human rights issues but may or may not have specific human rights training. However in the United States, primarily at Red Dog Operations, employees who perform security duties at the airport undergo human rights awareness training as part of the instruction for Homeland Security/Airport Screening.

Third-party security personnel working for us at any of our global operations undergo human rights training. In areas of higher risk, human rights training is included and hosted by our Risk Management Group.

- More information is available in the following sections of our Sustainability Report or \*\text{\theta} website:
- Appendix A Our Communities of Interest (Cols) 106
- Appendix B Our Memberships, Alliances and Resources 109
- Appendix C Greenhouse Gas Emissions and Conversion Factors for Fuel 112
- A GRI Finder Table showing you where you can find more information on each GRI Indicator 100
- A Glossary of Terms 113

# **Performance Overview**

|                       |  | 2009              | 2008  | 2007       | 2006      |
|-----------------------|--|-------------------|---|------------|-----------|
| Social                | Community Investment (CAD\$) (1)                       | 16,040,000        | 14,179,000                                  | 16,892,000 | 3,876,000 |
|                       | Local Procurement - Percent of Spending                | 18                |   |            |           |
|                       | on Local Suppliers (%)                                 |                   |   |            |           |
| Safety and            | Total Recordable Injury Frequency (TRIF) (3)           | 1.25              | 1.30  | 2.58       | 2.91      |
| Health (2)            | Fatalities   | 3                 | 1   | 1          | 4         |
|                       | Lost Time Injury (LTI)                                 | 72                | 88  | 158        | 125       |
|                       | LTI Frequency (LTIF)                                   | 0.39              | 0.40  | 0.97       | 0.94      |
|                       | Severity (3)   | 114               | 39  | 61         | 204       |
| Energy and GHG        | Fuel (TJ)  | 26,681            | 30,334                                      | 24,510     | 22,874    |
| Emissions             | Electricity (TJ)                                       | 11,383            | 13,394                                      | 12,463     | 13,056    |
|                       | Total Energy Use (TJ)                                  | 38,065            | 43,728                                      | 36,973     | 35,930    |
|                       | CO <sub>2</sub> e (Direct) (kt)                        | 2,350             | 2,649                                       | 2,266      | 1,985     |
|                       | CO <sub>2</sub> e (Indirect) (kt)                      | 104               | 210   | 159        | 153       |
|                       | CO <sub>2</sub> e (Total) (kt)                         | 2,455             | 2,859                                       | 2,425      | 2,138     |
|                       |  | n operation in th | the Greenhouse Gas Programs and Performance |            |           |
|                       | section of our Sustainability Report 🚨 47.             |                   |   |            |           |
| Materials             | Waste rock (kt)  | 528,875           | 555,151                                     | 459,257    | 455,155   |
|                       | Tailings (dry) (kt) (4)                                | 52,885            | 57,859                                      | 61,591     | 61,178    |
| Environmental         | Permit Non-compliance (5)                              | 83                | 139   | 145        | 160       |
| Compliance            | Regulatory Non-compliance (6)                          | 29                |   |            |           |
| Reportable Spills     | Number of spills                                       | 225               | 287   | 306        | 274       |
|                       | Volume of spills (L) (7)                               | 653,755           | 987,684                                     | 11,625,612 | 1,396,991 |
|                       | Weight of spills (kg)                                  | 33,573            | 4,522                                       | 4,686      | 4,752     |
| Biodiversity (8)      | Land reclaimed during the current year (ha)            | 214               | 164   | 281        | 85        |
|                       | Land reclaimed to date (ha)                            | 6,929             | 6,715                                       | 6,240      | 5,993     |
|                       | Total land disturbed (ha)                              | 18,076            | 18,043                                      | 17,728     | 17,381    |
|                       | Land reclaimed / land to be reclaimed (%)              | 38%               | 37%   | 35%        | 34%       |
| Waste<br>Management & | Hazardous Waste sent off site but not recycled (t)     | 5,084             |   |            |           |
| Recycling (6)         | Hazardous Waste treated/disposed of on-site (t)        | 23,871            |   |            |           |
|                       | Hazardous Waste recycled (t)                           | 23,915            |   |            |           |
|                       | Non-Hazardous Waste sent off site but not recycled (t) | 668               |   |            |           |
|                       | Non-Hazardous Waste treated/disposed of on-site (t)    | 103,866           |   |            |           |
|                       | Non-Hazardous Waste recycled (t)                       | 42,573            |   |            |           |

|       |                                   | 2009        | 2008        | 2007        | 2006        |
|-------|-----------------------------------|-------------|-------------|-------------|-------------|
| Water | Groundwater withdrawal (m³)       | 13,133,494  | 18,733,539  | 12,380,410  | 10,401,839  |
|       | Surface water withdrawal (m³) (9) | 105,923,084 | 112,597,333 | 112,463,175 | 113,118,022 |
|       | Other water withdrawal (m³)       | 261,000     |             |             |             |
|       | Water recycled/reused (m³) (10)   | 118,079,269 | 123,040,137 | 133,925,155 | 124,090,808 |
|       | Water recycled/reused (%) (10)    | 101.0       | 106.7       | 93.2        | 99.5        |

- (1) For historical data, totals will be different than previously reported due to the new ownership or closure of certain operations.
- (2) Safety statistics include both employees and contractors. Frequencies are based upon 200,000 hours worked.
- (3) Total Recordable Injury Frequency and Severity values for 2008 (1.30 and 39.27, respectively) are slightly different from those reported in our 2008 Annual Report (1.32 and 39.28, respectively) due to injury upgrading/downgrading, claim denial by medical professionals, or investigative results.
- (4) The implementation in 2009 of a centralized Environment, Health, Safety and Community database, uploaded with historical data, enabled site personnel to review and refine previous years' data where warranted. This resulted in a restatement of the 2008 and 2007 tonnages for Tailings (dry)(kt) from 58,304 kt and 60,038 kt to 57,859 and 61,591 kt, respectively.
- (5) Permit non-compliance significantly decreased over the previous year, due to increased settling pond capacity, improved maintenance and erosion control, and installation of turbidity curtains in order to decrease Total Suspended Solids (TSS).
- (6) The statistics reported for 2009 were modified from those reported in previous years in order to more closely follow the GRI guidelines and provide a more meaningful measure.
- (7) The 2007 total is comprised mainly (i.e., ~95%) of one very large-volume spill of tailings slurry at the Hemlo mine in 2007. This spill, and the substantial improvements made in response, is described in our 2007 Sustainability Report under the heading "Significant Environmental Incidents".
- (8) The amount of "land reclaimed to date" does not always reconcile with the total of "land reclaimed during the current year" added to the "land reclaimed to date" from the previous year. This is because the total number of hectares disturbed in addition to those available for reclamation may change year after year.
- (9) A significant portion of the surface water withdrawn (~80%) is cooling water used by Trail Operations. This water does not come into contact with chemicals or reagents. The only change it undergoes is a slight increase in temperature.
- (10) The implementation in 2009 of a centralized Environment, Health, Safety and Community database, uploaded with historical data, enabled site personnel to review and refine previous years' data where warranted. This resulted in a restatement of the 2008 volume for Water Recycled/Reused (m²) from 131,780,065 m³ to 123,040,137 m³. The Water Recycled/Reused (%) was restated from 100.3% to 106.7%. This percentage calculation is based on the volume of water used (withdrawn from source) divided by the total volume of water recycled/reused. The GRI formula for calculation of Total Percentage of Water Recycled/Reused (total volume used/total volume recycled) is inconsistently applied within the industry. We continue to work toward standardizing the methodology. Additional flow monitoring equipment will be installed at some operations in 2011 in a continuing effort to ensure more accurate flow measurements.

## Sustainability Report Review Panel

Our belief in the value of engagement extends to our sustainability reporting. For the second year, we reconvened our Sustainability Report Review Panel, representing a diversity of interests and expertise. The Panel reviewed our 2008 report so that we could learn how to improve our reporting for 2009 and beyond. We are extremely grateful to all the Panel members for giving us the benefit of their experience. The complete Panel Report, including our response to the Panel's recommendations, is available in our \mathfrak{theta} website.

#### Panel Structure - How we did it

We selected Panelists based on their experience, perspective and ability and willingness to frankly share their constructive feedback with us. Most of the Panel members participated in the review of our 2007 Sustainability Report and were able to comment on changes. All of the Panelists, with the exception of the Highland Valley Copper employee, were external to Teck. The Panel included the following people:

- Chris Ballance, Northwest and Ethical Investments, Senior Sustainability Analyst
- Karen Campbell, Pembina Institute, Director of Strategy and Staff Counsel (attended part of meeting)
- Salvatori (Sam) Costa, Highland Valley Copper, Senior Training Foreman
- Dan Jepsen, consultant, formerly with AME BC
- James Morin, BC Institute of Technology, Aboriginal Minerals Training Program
- Richard Prokopanko, RioTinto Alcan, Director of Corporate Affairs and Sustainability
- Caroline Rossignol, Barrick, Manager, Corporate Social Responsibility

In addition, the Panel considered written input from:

- Uwafiokun Idemudia, York University, Professor with research interests in natural resource conflict and international development
- Stephen Kibsey, Caisse de dépôt et placement du Québec
- · Carol Murray, ESSA Technologies

## Panel Results – What We Learned and How We Have Included Their Recommendations

The Panel provided comments and suggestions regarding the review process itself, report content and report presentation. The Panel commended Teck for its openness in inviting external review of its reporting. One Panelist wrote that the "whole idea of a Panel review is excellent and fits in well with the concept of sustainability by engaging stakeholders." The willingness of the volunteer Panel to return for a second year indicates to us that they believe their efforts are making a difference. Some of the recommendations from the Panel that we included in the 2009 report include:

- We have further developed our sustainability strategy by creating a cross-functional working group with a mandate to develop a sustainability leadership initiative and develop both long-term goals and action plans while enhancing the sustainability culture in the company.
- We returned to a designed printed report format including diagrams, illustrations and pictures and we once again resumed our assurance process to the International Council on Mining and Metals' Assurance framework.
- A plan to develop and integrate social management through our Management Standards and associated Social Management and Responsibility Toolkit (SMART) has been initiated which will take place over a multi-year timeframe. Ultimately more detailed social reporting will be available.
- We provided more accessible language, summaries and illustrations to help communicate difficult and technical terminology.
- Although detailed reporting data is not available for our projects, we provided further reporting on our Oil Sands projects as seen in the Your Concerns Our Response: Oil Sands 25 section.
- A case study entitled A Partnership Built on Trust at Pend Oreille Operations 437 was provided on the topic of mine closure.

# Independent Assurance Report to the Board of Directors and Management of Teck Resources Limited

#### Introduction

Environmental Resources Management (ERM) was engaged by Teck Resources Limited (Teck) to provide limited assurance on selected sustainability subject matters presented in Teck's 2009 Sustainability Report (the Report). The Report includes both the published hard copy "Summary Report" and the information and data published on the sustainability section of www.teck.com.

#### **Selected Subject Matters**

The following subject matters were selected based on the requirements of the International Council of Mining & Metals (ICMM) Sustainable Development Framework Assurance Procedure and in consultation with Teck management:

- Teck's alignment of its sustainability policies to ICMM's 10
   Sustainable Development (SD) Principles and any mandatory
   requirements set out in ICMM's Position Statements ("ICMM
   Subject Matter 1").
- Teck's approach to identify and prioritise its material sustainability risks and opportunities ("ICMM Subject Matter 2").
- The existence and status of implementation of systems and approaches used by Teck to manage the following sustainability risks and opportunities ("ICMM Subject Matter 3"):
  - · Fatalities among contractor staff;
  - Emerging climate change legislation;
  - · Water supply in Chile;
  - · Water quality in Alaska and Elk Valley;
  - Engagement with indigenous people and local communities; and
  - · Staff retrenchments.
- The following performance data related to the material sustainability risks identified under ICMM Subject Matter 3 ("ICMM Subject Matter 4"):
  - Total direct and indirect greenhouse gas emissions by weight;
  - · Total water withdrawal by source;
  - Percentage and total volume of water recycled and reused;
  - · Total water discharge by quality and destination;
  - Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region; and
  - Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.

 Teck's alignment to the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines application level A+ ("Subject Matter 5").

#### Assurance Standards and Criteria

We delivered our work in accordance with ERM's assurance methodology which is based on recognized international assurance audit standards including ISAE 3000, ISO 14064:3 and ISO 19011. Further, the assurance engagement was planned and performed in accordance with the ICMM's Sustainable Development Framework Assurance Procedure.

In providing assurance on the selected subject matters, we applied the following assurance criteria:

- ICMM's 10 Sustainable Development (SD) Principles and any mandatory requirements set out in ICMM's Position Statements:
- · Teck's approach to materiality as presented in the Report;
- Teck's management systems and approaches for the selected subject matters as presented in the Report;
- Teck's performance data definitions as presented in the Report; and
- The reporting requirements stipulated by the GRI Sustainability Reporting Guidelines application level A+.

#### **Respective Responsibilities**

The management of Teck is responsible for collecting, preparing and presenting the selected subject matters in accordance with the criteria and for maintaining the internal controls and systems designed to support the management and reporting of its sustainability performance. ERM's responsibility is to express its assurance conclusions on the selected subject matters presented in the Report.

#### **Our Approach**

Our assurance engagement consisted of the following activities:

- A media analysis and an Internet search for references to Teck during the reporting period;
- Interviews with senior Teck management and relevant staff at corporate and business unit levels to understand sustainability strategies, policies and management systems for material issues and their implementation across the operations;
- Interviews with Teck corporate personnel to understand the materiality process used to determine which sustainability issues to include in the Report;
- An evaluation of the StreamLine data management tool used to collect, process and aggregate sustainability performance data, including its conformance to the data compilation requirements and definitions specified by the GRI Indicator Protocols;

- Review of Teck sustainability policies, charters and standards to assess their alignment with ICMM's 10 Sustainable Development Principles and mandatory requirements of the ICMM Position Statements;
- Visits to the Carmen de Andacollo, Red Dog and Elkview sites
  to (i) develop an understanding of the degree to which, and
  how, relevant material SD risks are identified, ii) understand
  the systems and mechanisms used to manage material
  SD risks and opportunities, and (iii) assess site-specific
  mechanisms for the collation, processing and reporting of
  sustainability information and data. The sample of sites was
  selected to obtain a cross section of significant contributors
  to sustainability and financial performance and to provide
  coverage across business units, commodities, type of
  operations, geographic regions and languages;
- Testing of the corporate data collection, aggregation and disclosure processes for GRI sustainability indicator data;
- Sample testing of reported GRI performance indicator data for reliability;
- Review of the Report to determine the level of consistency between our understanding of how Teck manages the subject matters and the statements made in the Report;
- Review of the Report, including the GRI Finder, to determine the validity of Teck's self-declaration of the GRI (G3) A+ application level in the Report; and
- Preparation of this Assurance Statement.

Teck gave ERM full access to the information and personnel that we believe were necessary to gather sufficient evidence to provide a basis for our assurance conclusions.

#### **ERM Independence and Competence**

During 2009, ERM has worked with Teck on other assurance and consulting engagements. ERM operates strict conflict of interest checks and we have confirmed the independence of our team to Teck for delivering this assurance work.

Our team includes environmental, health and safety, social, economic, business administration and assurance specialists who have performed similar engagements with a number of multi-national companies. Our assurance team has the required combination of education, experience, training and skills for this engagement.

#### **Inherent limitations**

The reliability of sustainability information is subject to inherent limitations given their nature and methods for determining, calculating or estimating such information. It is important to understand the sustainability information and related statements in the Report in the context of these limitations.

#### **Assurance Conclusions**

Based on our limited assurance activities, as described above, we conclude that in all material respects, the above selected sustainability subject matters are appropriately reported within the Report; i.e. nothing has come to our attention that causes us to conclude that the selected subject matters are materially misstated (limited assurance).

#### **Observations and Recommendations**

Based on our work set out above, we have provided Teck management with a confidential report describing our findings and suggestions for further improvement. Without affecting our assurance conclusions, some of our key observations and recommendations include:

#### **Observations:**

- Significant efforts have been made to improve the safety leadership and culture throughout the company through initiatives such as Courageous Safety Leadership and Visible Felt Leadership.
- The new StreamLine tool for collecting, processing and reporting of sustainability data has been effectively implemented at all levels of the organisation.

#### Recommendations for Improvement:

 We welcome the sustainability strategy development process that was commenced in 2009. The process will provide an excellent opportunity to align and integrate Teck's sustainability reporting (internal and external) with its broader processes for defining sustainability priorities and targets, managing sustainability risks and opportunities, and monitoring performance. In the coming years, it is recommended that the sustainability report be composed to reflect Teck's strategic approach to sustainability management and the performance that has been achieved through the application of this deliberate approach and strategy.



#### **Environmental Resources Management**

Vancouver, Canada, 29 October 2010

ERM is a global provider of environmental, social and corporate responsibility consulting and assurance services. Over the past 5 years we have worked with over half of the world's 500 largest companies, in addition to numerous governments, international organizations and NGOs.





#### **Environmental Benefits Statement**

By using paper made from 100% post-consumer recycled content, the following resources have been saved.

| _ | trees       | 🖏 water | ್ energy    | solid waste | greenhouse gases |
|---|-------------|---------|-------------|-------------|------------------|
|   | 29          | 50,225  | 9           | 363         | 1,242            |
|   | fully grown | litres  | million BTU | kilograms   | kilograms        |

Environmental impact estimates were made using the Environmental Defense Paper Calculator. For more information visit http://papercalculator.org.

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