Verifying the Balance

The Sustainability Report

2016 - 2017
For our stakeholders...
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Message from the Managing Director

Today our mining product is found in almost everything you touch. What we provide to the human race is of the utmost value in so many ways. But it is not only our product that benefits our society. The very operations that mining brings have always been a milestone of economies and the development of civilization. At MYTCL we employ more than 2,000 local people who will spend their entire careers working and growing with us, prospering as time presses forward. And, as they improve their own livelihoods through our sustainable and responsible mining methods they also build thriving social wealth within their own community. The foundations of our success rely on the success of the people who work for us, and I am so very honoured to witness the ongoing potential for economic abundance that our Company is providing to the people within Myanmar.

As Managing Director of this organisation it is my imperative to target environmentally-friendly operations and rehabilitations, as it has become one of the most important prerequisites brought by today’s mining principles. Our corporate structure relies upon this insight, and I have set it as the focal point of our operations, to ensure respect to the environment as our social responsibility and our duty of common humanity.

The possibilities for exponential growth are within our grasp, and I will continue to provide open and transparent management systems throughout all of our operations. MYTCL will maintain a partnership revealing a good neighbour relationship with all of our stakeholders. This will fortify MYTCL as an asset, resulting in the sustainable economic achievement in the evolution of this brilliant country.

I look forward to another successful year for all of us, as we work in unity towards our promising destiny of accomplishments.
MYTCL is pleased to present this third edition of the Sustainability Report, illustrated as "Verifying the Balance". This year’s title persists in validating our dedication to continuously create more constructive business processes. Our successes are transparent, and are also visually demonstrated within the foundations of positive considerations we provide for our Stakeholders. In this edition we take a different approach to defining our activities that are managed throughout the year, as well as our aspirations for the future. We illuminate engagements with our communities and our government authorities in order to encourage open and transparent dialogues regarding immediate concerns, the preservation of culture and the sustainability of the environment we share.

"We measure our community's consent to verify the positive balance we actively pursue"

The purpose in creating this report is to model a platform on which we can display our targets and goals for the past year and for the year to come. It allows us to demonstrate compliance, forward thinking, achievements as well as areas for improvement, and most importantly evidence that we are listening to our Stakeholders. As we look back over the years that we have utilised this sustainability report platform, we recognise that there is an essential factor of success that we should highlight within this report for 2017. This is the voice of our Stakeholders.

Verifying the Balance reflects our increasing commitment to all dimensions of sustainability, and it validates the concerns received from you, our employees, communities and other Stakeholders over the past year. It also conveys how our Stakeholder relationships and the interaction between our company, our employees and communities, and so many others around the world are critical to the sustainability management of our mining enterprise.

Verifying the Balance certifies how we are working to address the challenges of society now, and in the future, by implementing sustainability strategies. Through a detailed analysis of issues and risks we have selected the highest priority of sustainability topics to develop and report on.

These priorities include protecting natural capital through environmental performance and resource efficiency, aggressively pursuing innovations that enable MYTCL to operate in a more sustainable manner, as well as investing in community and corporate social responsibilities that produce both economic value and sustainability improvements across several dimensions. In this year’s assessment we have also included the influence of our communities.

In this report we continue to emphasise a strong foundation in business ethics, personal values, performance and accountability that are essential to the growth of our business. We strive for transparency regarding our interests, about our results against stated goals, and in doing so we are trending towards utilising the most modern reporting protocols and practices to improve our communication to you.

Sustainability at MYTCL is not just about technical innovation and the environmental performance of our operations. It is a reflection of our actions every day at our work, in our communities and in our lives. It is about finding better ways to do everything required of us as a business. It is a journey of change; of business and personal growth and of finding new opportunities to positively impact society’s needs through our community and social development programs.

As we move forward it remains our constant endeavour to address concerns from those living in harmony with our operations, and to learn from our interactions. We do what we say, and we say what we do. Follow us as we expose how we offset the risks to our employees, to the communities and to the environments associated with our processes. Review with us how we measure our progress and our community’s consent in verifying the positive balance we actively pursue.

Through the use of this Sustainability Report we acknowledge our accountability to our Stakeholders, and alongside its transparency we ensure our compliance to international mining standards.
အက်ိဳးျပဳလုပ္ငန္းမ်ားေရရွည္ထိန္းထား ခု ျဖစ္ပါသည္။ ေလးစားလိုက္နာမႈ၊ ႀကိဳတင္ေတြးဆမႈ၊ ေအာင္ျမင္မႈမ်ားအျပင္ ေနရာအလိုက္ တိုးတက္လာမႈႏွင့္္ အဖြဲ႕အစည္းတို႕ႏွင့္အတူ စုစည္း ေတြ႕ဆံု ညိႈႏိႈင္းမႈမ်ားကို တင္ျပသြားပါမည္။

ထိးေအာင္ လုပ္ေဆာင္ျပပါမည္။ ဤထုတ္ေ၀မႈတြင္ တစ္ႏွစ္ပတ္လံုး စီမံေဆာင္ရြက္မႈကို ေပၚလြင္ေစသလိုအေျခခံ အေဆာက္အအံု ေဖာ္ထုတ္ျခင္း၊ က်န္းမာေရး ေစာင့္ေရွာက္မႈ၊ ပညာေရးႏွင့္ အျခား၀န္ေဆာင္မႈမ်ားကို ႏိုင္မႈဆိုင္ရာအစီရင္ခံစာ

“လူမႈအဖြဲ႕အေဆာင္ရမည့္ ဆန္းသစ္ တီထြင္မႈမ်ားပါရွိသလုိ လူမႈ အဖြဲ႕သြားပါမည္။ လုပ္ငန္းစဥ္မ်ား၏ ပန္းတိုင္အတြက္ ရရွိလာ ဤအစီရင္ခံစာတြင္ လုပ္ငန္းဖြံ႕ၿဖိဳးေရးအတြက္ မရွိမျဖစ္လူမႈအဖြဲ႕အစည္းမ်ားႏွင့္ ေစ့စပ္ ညိွႏိႈင္းေဆာင္ရြက္ျခင္း

“Sustainability is a constant balance of social and environmental harmony alongside our operations.”

ယၡဳႏွစ္၏ အကဲျဖတ္ ဆန္းစစ္ရာတြင္ လူမႈအဖြဲ႕အစည္းမ်ား၏ ေဆာင္ရမည့္ ဆန္းသစ္ တီထြင္မႈမ်ားပါရွိသလုိ လူမႈ အဖြဲ႕သြားပါမည္။ လုပ္ငန္းစဥ္မ်ား၏ ပန္းတိုင္အတြက္ ရရွိလာ ဤအစီရင္ခံစာတြင္ လုပ္ငန္းဖြံ႕ၿဖိဳးေရးအတြက္ မရွိမျဖစ္လူမႈအဖြဲ႕အစည္းမ်ားႏွင့္ ေစ့စပ္ ညိွႏိႈင္းေဆာင္ရြက္ျခင္း
MYTCL recognises that commitment to a sound corporate governance and risk management structure contributes to reliable management practice and increasing community confidence in our performance, which is vital to our continued growth and success.

ENDORSING OUR VALUES

MYTCL’s values reflect the company’s commitment to sustainability. They have been developed to ensure that we visibly act as a responsible corporate citizen for the benefit of all of our stakeholders.

Safety – We take care of our safety, health and wellness by recognising, assessing and managing risk, and choosing safer behaviours at work and at home to reach our goal of zero harm.

Integrity – We behave ethically and respect each other and the customs, cultures and laws wherever we operate.

Sustainability – We serve as a catalyst for local economic development through transparent and respectful stakeholder engagement, and as responsible stewards of the environment.

Responsibility – We deliver on our commitments, demonstrate leadership, and have the courage to speak up and challenge the status quo.

Inclusion – We create an inclusive environment where employees have the opportunity to contribute, develop and work together to deliver our strategy. We transform mineral resources into shared value for our stakeholders and lead the Myanmar mining industry with professional honesty, safety, social responsibility and environmental stewardship.

CODE OF BUSINESS CONDUCT AND ETHICS

The MYTCL board has endorsed a Code of Business Conduct and Ethics that formalises the long-standing obligation of all MYTCL individuals, including corporate management, to behave ethically, act within the law, avoid conflicts of interest and act honestly in all business activities. MYTCL’s Code of Business Conduct and Ethics reinforces the company’s commitment to giving proper regard to the interests of people and organisations dealing with the company. Each MYTCL person is required to respect and abide by the company’s obligations to employees, stakeholders, customers, suppliers and the communities in which we operate.

INTERNATIONAL CONTINUITY RISK MANAGEMENT

Continuity Risk Management is the conscience of our Company, devoted to ensuring that products and services continue to flow and that Trust and Brand Equity are protected. We believe that we are fully prepared to manage the varied risks associated with our mining organisation within the Republic of the Union of Myanmar because we fully understand their extent. This means that we are capable of calculating, adapting, analysing, deciding, acting and communicating every day and at unexpected times of crisis.

MYTCL’s Business Continuity Planning (BCP) involves defining potential risks, determining how those risks will affect operations, implementing safeguards and procedures designed to mitigate those risks, testing those procedures to ensure that they work, and periodically reviewing the process to make sure that it is up to date. MYTCL has a sound system of risk oversight management and internal control based on the international standards outlined in the ISO 31000 Risk Management Framework. This ISO standard integrates all of MYTCL’s third party certifications following a deliberate and clear methodology of evaluating and observing performance.

MYTCL has in place limits and a range of policies and procedures to monitor the risk in its activities and these are quarterly reviewed by an internal audit committee, as well as biannually during internationally completed SGS audits.

MYTCL’s Risk Management Policy also sets out the framework for risk management, internal compliance and control systems. Governance and risk management is sponsored by the board, and is a top priority for senior managers, initiated through policy creation determined by the Managing Director.

“At MYTCL we transform mineral resources into shared value for our internal and external stakeholders.”

Our corporate governance can be defined as the control systems by which our company is directed and managed. It is a clear framework of rules, relationships, systems and processes, fairness and transparency in MYTCL’s connection with all stakeholders, which reinforce MYTCL’s long-established values and behaviours and the way we do business. It also defines the internal framework, which the MYTCL board of directors is accountable to stakeholders for the operations, performance and growth of the company, and how the risks of our mining business are identified and managed.

A Foundation of Trust
ဗိုလ်ချင်းစီးပွားရေး လေးစားရေသာပါဝင်ပတ္သက္သူမ်ားႏွင့္ ေစ့စပ္ညိွႏႈိင္း ေရရွည္တည္တံ့ခိုင္ၿမဲျခင္း - ပတ္၀န္းက်င္အား တာ၀န္ကင္းရွင္းျခင္း၊ က်န္းမာေရးႏွင့္ ခ်မ္းသာသုခရရွိ ျခင္းတုိ႕ကို တြင္ လံုး၀ထိခိုက္မႈ ကင္းစင္ေသာပန္းတိုင္ ေရာက္ရွိေစ ခန္႕ခြဲျခင္း၊ ဆန္းစစ္ျခင္းႏွင့္ လုပ္ငန္းခြင္ႏွင့္ေနအိမ္မ်ား  MYTCL ဏွားရောင်းချခ်သည္ ကုမၸဏီ၏ ကတိက၀တ္ ေရရွည္ တည္တံ့သြားရန္ပင္ ျဖစ္ပါသည္။  MYTCL သည္ လုပ္ငန္းတြင္ ႀကံဳေတြ႕လာမည့္ အႏၱရာယ္မ်ားကို မည္ကဲ့သို႕ ခြဲျခား သတ္မွတ္ျခင္းႏွင့္ စီမံခန္႕ခြဲ ေဆာင္ရြက္ရမည္တို႕ကို ပြင့္လင္းျမင္သာမႈတို႕သည္လည္း ထင္ရွားေသာ လုပ္ငန္း သတ္မွတ္ေဘာင္တစ္ရပ္ ျဖစ္ပါသည္။  MYTCL ဦးထွင်သားခွင့္အားလုံး လုပ္ငန္း၏ လုပ္နည္းလုပ္ဟန္တို႕အား တြန္းအားေပးမည့္ ပါဝင်ပတ္သက္မႈမ်ားႏွင့္ MYTCL တို႕စီးပြားေရးအရ ေခါင္းေဆာင္ႏိုင္မႈကို သရုပ္ေဖာ္ျပျခင္းႏွင့္ ကတိ က၀တ္အုပ္ခ်ဳပ္မႈ ႏွင့္ ေျပာင္းလဲေပးပါသည္။

ယံုၾကည္ကိုးစားမႈႏွင့္ ကုန္အမွတ္တန္ဖိုးကို ကာကြယ္ၿပီး က်င့္၀တ္ဥပေဒကို အျပည့္အ၀ ေထာက္ခံရပါသည္။ အုပ္ခ်ဳပ္မႈႏွင့္ ေဘးအႏၱရာယ္ စီမံခန္႕ခြဲမႈကို ဘုတ္အဖြဲ႕မွ တတိယအဖြဲ႕အစည္း၏ အသိအမွတ္ ျပဳထားေသာအရာမွတ္သားျခင္း ျပဳလုပ္မည့္ ခ်င့္ခ်င့္ခ်ိန္ခ်ိန္ႏွင့္ ရွင္းလင္းတစ္ခု ရွိပါသည္။ ဤ ISO စံခ်ိန္စံၫႊန္းတြင္ လုပ္ငန္း MYTCL သည္ ISO 31000 ၏ ေဘးအႏၱရာယ္ဆိုင္ရာ ဆက္သြယ္ ေဆာင္ရြက္ျခင္း၊ အေရးယူ ေဆာင္ရြက္ျခင္း၊ ေၾကာင္း ယံုၾကည္ပါသည္။ ဆိုလိုသည္မွာ ေန႕စဥ္ႏွင့္
Colonel Hla Sein - MEHL Director for MYTCL Project

MEHL’s partnership with MYTCL shares the common ambition of protecting the future health of the citizens of this region, as well as to respond to their current hopes of development. As a leading global mining company we hold a responsibility toward all our stakeholders. We are committed to improving access to innovative healthcare solutions for our villages, upholding high ethical standards in all our activities, promoting the development of our workforce and respecting the environment in which we operate.

U Kaweinda - Htanaunggon Monastery Monk

MYTCL cares about the potential impact of their mining activities in the environment and on people’s health, and they have consequently implemented safeguards at every stage in the life cycle of their production. On a quarterly basis each year, the Myanmar government related ministries evaluate, monitor and seek to improve social as well as environmental operations and contribute to advancing the MYTCL goal of sustainable mining. In addition, they support transparency meetings with the community about the activities MYTCL has undertaken to help protect the environment and to enhance economic development throughout the region.

SUSTAINABILITY

U Kaweinda - Htanaunggon Monastery Monk

sustainably reducing the impacts of mining ...

DEVELOPMENT

sharing a common culture and valuing our people....
it's because of CSR that my son can go to school ...

U Chaw Kyaw Hein - SLC & Fire Department

my job is to encourage people to exceed their own expectations...

Daw Khin Swe Myint - Supply Superintendent

I am not a very well educated man, but Yang Tse gave me a well-paying job and a chance to provide for my family that I could not get anywhere else. I can see the Company helping many people in so many different ways in our communities. Management even comes into our village, sees how we are living and asks us directly what we need. This gives me hope for a better future for my children.

RESPONSIBILITY

MYTCL offers a unique employee experience, which provides me as a Manager the tools to build a great team. All top management are continually reminded that as leaders the primary expectation placed on us is to develop our staff to their full potential. This is our culture and philosophy, because our business is not only about producing copper... it's also about producing successful people.
The Sabetaung and Kyisintaung (S&K) mine is an open-cut copper ore mine of 3 primary deposits that are located in the Monywa District of Sagaing Division in Myanmar. Established early in the 20th Century, west of the Chindwin River, the mine-site is approximately 40 minutes by road from Monywa and within a populated area of nearly 500,000 people. This semi-arid expanse offers about 700mm of annual rainfall, and finds the landscape visually stunning with its shrub covered rolling hills and Toddy Palm trees dotting the landscape.

This is a legacy mining area that began in the early 17th century with artisanal mining of the region. In the 1950’s the S&K deposits began to be explored on a much larger scale and have developed into a mining enterprise today. The S&K mine has also evolved into a mining municipality working side by side a bountiful agricultural community.

Many international companies have been involved in the development of this mine under several eras of ownership. In 2016 the Southwest Nonferrous Kunming Exploration Surveying and Design Institute Inc. completed the final ore body confirmation for the Kyisintaung Pit Optimisation. This extensive development drilling was followed up with a mine plan expansion that would extend the life of the Kyisintaung Mine approximately another 10 additional years beyond the original estimates. Further studies are being sourced by MYTCL to extract the ore reserves even further using modern resource excavation technologies. Others such as Knight Piésold Pty Limited, Coffee Partners International Pty Ltd., The World Bank, Westec (Welsh Engineering Science & Technology, Inc.), Haskoning (Royal Dutch Consulting Engineers and Architects), and Golder Associates, Ivanhoe, China Nerin Engineering Co., Ltd. and the Institute of Process Engineering (Chinese Academy of Sciences IPE-CAS) are some of the more prominent world-class names that have been involved in the consultation and operations of the S&K Project.

Today the S&K Mine is operated by Wanbao Mining Limited with the name of Myanmar Yang Tse Copper Limited – MYTCL. Joining hands with mining businesses from China and abroad, based on the principles of international cooperation and mutual benefit, Wanbao Mining is developing high-quality mineral resources from around the world utilising professional expertise and managing with international diligence.

The Kyisintaung Pit is currently under development of Phase-1 with a remaining ore reserve of 168,788,477 tonnes of Copper Ore at 0.432%.
The Sabetaung Pits produced 121.8 million tons of copper ore and waste before reaching completion in 2014.

Nonferrous Kunming Exploration Surveying and Design Institute Inc. မှ တိုးပွားခဲ့သော မောင်းမာရိုင်းမီးပေးခြင်းကို အရာရှိသူများက တွေ့စွဲခဲ့ရာ အကျိုးသေးသော အေရးပြုလုပ်ခဲ့သည်။ ပြောင်းလဲခဲ့သော လုပ်ငန်းများအနက် အကြားပြုလုပ်သော စီမံခွဲများကို အသံုးထားသည်။ အခြေခံအမည်အတွက် အခြေခံကိန်းများ ဖြစ်ပါသည်။ 

Wanbao Mining Limited မှ Myanmar Yang Tse Copper Limited (MYTCL) အဖြစ် S&K စီမံခွဲကို တာဝန်ယူလုပ်ကိုင်ခဲ့သော များအားလုံးကို အကြောင်းဆိုခဲ့သည်။ 

Royal Dutch Consulting Engineers and Architects, Golder Associates, Irambo, China Nerin Engineering Co., Ltd. ကို့ The Institute of Process Engineering (Chinese Academy of Sciences IPE-CAS) မှ လှုပ်ရှားထားသော အကြားပြုလုပ်သော စီမံခွဲများကို အောက်ပါကို အသံုးထားသည်။ 

Wanbao Mining မှများကို ယေဘုယျအရာရှိများက အကြောင်းဆုံးအချိန်တွင် ပြောင်းလဲခဲ့သည်။
International compliance is a deep-rooted culture at MYTCL, and the Company has been awarded 3 significant certifications to advance recognition as an internationally acclaimed enterprise. These awards have been sustained in adherence to SGS – Société Générale de Surveillance guidelines since 2011 under MYTCL, and are twice annually audited for stringent management of conformity.

Internally, there are 75 employees that have been awarded Internal Auditor Certifications by SGS. This intensifies the MYTCL principles of achieving international performance by the very people who control the day to day operations. Additionally there are more than 100 SGS certificates awarded to employees and expatriate top management for completion of the ISO 9001:2015 and the ISO 14001:2015 transition training and comprehensive management courses. In 2016, the OHSE & Operational Development Manager also successfully completed the SGS 9001:2015 Lead Auditor IRAC Certification as an example of commitment by MYTCL’s leadership under the direction of the Managing Director.

Certification with SGS enables MYTCL to demonstrate that our products, processes, systems and services are compliant with national, and international standards and regulations. It also acknowledges the responsibility of sustaining customer defined standards. Certification is completed at MYTCL through the international SGS organisational certification network centres located in their Australia/Singapore/Thailand offices.

In 2016, MYTCL maintained cathode copper quality in accordance with LME Grade A specifications, as well as retained a best practices international performance standard throughout operations. These standards are published by ISO, the International Organization for Standardization. ISO is an international standard setting body composed of representatives from various organisations that promote worldwide proprietary, industrial and commercial standards.

ISO 9001 Standard

The ISO 9000 family of standards is related to quality management systems and is possibly the most complex of all the ISO Standards.

Focused on the business component of the organisation, ISO 9001 encourages MYTCL to develop KPis with objectives and targets that are monitored and measured on a continual basis with the intent of managing the quality of every aspect of the company’s operations. Based on 7 principles and a suite of interrelated process founded on risk management, the 9001 guidelines have a primary focus on Leadership as the essential key to achieving Customer Satisfaction.

This standard will be upgraded to the new version ISO 9001:2015 in July of 2017.

ISO 14001 Standard

ISO 14001 is a British Standard for occupational health and safety management systems. It exists to help the MYTCL organisation put in place demonstrably sound occupational health and safety performance.

In 2017 this standard will be replaced with the new ISO 45001:2016 and will join the suite of ISO Integrated Management Systems.

MYTCL’s focus is to use this system to promote a safe and healthy working environment by providing a framework that helps MYTCL to consistently identify and control health and safety risks, reduce the potential for accidents, act legislative compliance, and to improve overall performance.
ISO 31000 has been adopted as a national standard by more than 50 national standards bodies covering over 70% of the global population. It has also been adopted by a number of UN agencies and national governments as a basis for developing their own risk-related standards and policies, especially in the areas of disaster risk reduction and the management of disaster risk. MYTCL pays particular attention to the opening paragraph of the introduction to this ISO standard, which explains that risk is the consequence of an organisation setting and pursuing objectives against an uncertain environment. The uncertainty arises from those internal and external factors and influences that it does not completely control but that may cause the organisation to fail to achieve its objectives or may cause delay. These factors and influences can also lead to the objectives being obtained early or exceeded. Risk therefore is neither positive nor negative.

The ISO 31000 definition of risk shifts emphasis from past preoccupations with the possibility of an event (something happens) to the possibility of an effect and, in particular, an effect on objectives. When risk is defined like this, it reveals more clearly that managing risk is, quite simply, a process of optimisation that makes the achievement of objectives more likely. Risk treatment is then concerned with changing the magnitude and likelihood of consequences, both positive and negative, to achieve a net increase in benefit. Controls then are the outcomes of risk treatment, whose purpose is to modify risk. Gaining this understanding requires consideration of the effect and reliability of existing controls and any control gaps.

ISO 31000:2009 gives a set of general options to be considered when risk is treated. Importantly, the options deal with both risks that have downside and/or upside consequences. The options are:

1. Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;
2. Taking or increasing the risk in order to pursue an opportunity;
3. Removing the risk source;
4. Changing the likelihood;
5. Changing the consequences;
6. Sharing the risk with another party or parties (including contracts and risk financing);
7. Retaining the risk by informed decision.

ISO 26000 was created by a diverse group of experts, representing many different countries, stakeholder groups, and points of view. The ISO 26000 series represents a unique top-down protocol in corporate social responsibility standards determined to implement consensus on sustainable management standards across borders, and to provide practical implementation of the Global Reporting Initiative (GRI) standards. ISO 26000 demonstrates how to apply the 7 core principles of socially responsible behaviours: accountability, transparency, ethical behaviours, respect for stakeholders’ interests, and respect for the rule of law, respect for international norms of behaviours, and respect for human rights. It is a voluntary guidance standard not intended for certification and has been adopted internationally by various countries since its inception in 2010. ISO 26000:2010 provides MYTCL with a broad guidance, but does not offer specific instructions or require specific outcomes. As an active business that implements ISO 26000, MYTCL experiences opportunities to identify and act on our own business priorities, and to build stronger business models in the spirit of “continuous improvement.” MYTCL will continue to develop our own unique corporate social responsibility programs and to establish a leadership model for others within Myanmar. The standard defines Social Responsibility as the accountability of MYTCL for the impacts of our decisions and activities on society and the environment, through transparent and ethical behaviour that:

- contributes to sustainable development, including health and the welfare of society;
- takes into account the expectations of stakeholders;
- is in compliance with applicable law and consistent with international norms of behaviours; and,
- is integrated throughout the MYTCL organisation and practiced.

By using this international standard’s approach to Corporate Social Responsibility (CSR), MYTCL focuses on developing projects and programs to increase our success for sustainable growth beyond the life of the mining project. This standard has received massive involvement from more than 90 countries during its developing phase, and is expected to set the norm for Social Responsibility in the years to come. MYTCL is proud to be engaged in such internationally important strategies.
In today’s extractive industries, sustainability is not a frill—it is foundational, like reserves in the ground. If you don’t have reserves, you don’t have a mine. If you don’t have safe, sustainable practices, you won’t maintain your social license to operate.  

MYTCL’s commitment towards sustainable mining involves a set of tools and indicators to drive performance. These define how the key risks are managed responsibly within our operational facilities.

One focal key indicator is our community.

Our stakeholders want us to minimise our negative social and environmental impacts on communities and maximise benefits through long-term partnerships with our local communities and national groups. Often, what people want most is information. We understand that communicating how we work is a critically important step: one that we will persevere to share throughout the life of our mining operations. This means we must unceasingly engage with our communities and understand their concerns and priorities about our mining processes. We acknowledge that local communities want us to invest in local, sustainable development, and to contribute to development objectives through local hiring and procurement and community investments. They also want us to integrate respect for human rights into our business management processes.

We begin our mining practices by building strong and respectful community partnerships to allow us to operate safely and sustainably. Our people live and play in the communities around our operations. We often source from and work with local businesses. We are constantly aware that we operate on land that is of great importance for local populations and they entrust us to steward it carefully.
The Komatsu 2000 Excavator and the Caterpillar 777D

In July of 2016 the PX90 was introduced for deep pit mining

The Atlas Copco Drill Rig brings versatility to mine development

The newest addition to the fleet is the Cat 6020B, getting the job done efficiently and safely
Copper from the Monywa deposits have been extracted from shallow underground workings and smelted since the ages of the Myanmar Kings. From 1957 to the early 1980’s, exploration by Myanmar governments continued in cooperation with the United Nations, Japanese and Yugoslavian agencies.

The Sabetaung South Pit was completed in March of 2013, and the sister Sabetaung Pit finalised in November of 2014. Today Sabetaung Pits are under detailed Mine Closure engineering, while the Waste Rock Dumps of Sabetaung are progressively closed to international designs.

MYTCL focuses on a number of ways to reduce the land-use impacts of mining. These include reducing the overall footprint of the mining areas, minimising the amount of waste produced and stored, maintaining biodiversity by transplanting or culturing any endangered plants found on site, and by planning the expansion of the project around existing infrastructure where possible.

The Bio-Heap Leaching and Solvent Extraction-Electrowinning (SX-EW) process is an environmentally friendly way to economically produce high-grade copper from low-grade ore deposits, and is often referred to as the ‘green metal’.

MYTCL’s Sabetaung and Kyisintaung project adheres to a strict zero-discharge operation, and all solution flows are re-circulated to ensure that no effluence is discharged from the mine to outside of the lease area.

After mining, the ore is stacked onto the heaps for leaching in two manners:

1. Primary crushing and stacking incorporating an extensive system of conveyors, stackers and bridges to reach the outlying Heap Leach Pads.

2. Ore is directly dumped by 100-tonne dump trucks directly onto the heaps. This is called Run of Mine dumping, or ROM dumping.

In 2016 the Kysintaung Mine produced 69,293 tonnes of Total Contained Copper (Cont. Cu) at 0.47%. The term Cont. Cu is an estimation of the return on the ore mined once it has been extracted into Cathode Copper form.

Processing of the copper ore to produce marketable cathode manufactured copper involves the following three stages.

• Bio-Heap Leaching to dissolve the valuable copper from the ore,

• Solvent Extraction to purify and concentrate the copper solution generated by leaching, and

• Electrowinning to plate the copper metal into the cathode sheet form.

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Due to the limitation of throughput of the crushing and stacking section, run-of-mine ore is directly placed onto the leach cells by dump trucks. Dumped ore is spread out by bulldozers as necessary and contains both fine and coarse sizes. The entire stacking strategy is based on physical characteristics of mined ore, and evolves and changes as the ore characteristics vary during the mining progresses. Before installation of an irrigation pipe system the surface is ripped to 300mm depths by bulldozers.

Ore characterization is pre-determined from drilled chip samples sent to the metallurgical laboratory. The quality control personnel are assigned to supervise the process of selection, determining whether ore is going to be sent to crushing facilities for radial stacking, or for ROM dumping cells, as per the competency level of the ore. A continuous cell expansion program has been implemented for production targets. At present there are six functioning leach pads with 67 cells and another leach pad designed with construction dates estimated for stacking in early 2018-19.

The stacked ore is irrigated using either a network of pipes and low pressure sprinklers, called wobblers, or drip irrigators. A diluted sulphuric acid solution containing high levels of dissolved iron is used to extract the copper from the stacked ore. The acidic solution also forms naturally from the heaps by the accelerated weathering of some rocks that contain pyrite, an iron sulphidic mineral. Naturally occurring bacteria catalyses this reaction, and consequently the process is termed Bio-Heap Leaching.

The base of each heap is lined with a minimum 300mm clay layer to create an impermeable environmentally safe barrier. Next, high density polyethylene elastic sheeting (HDPE) is heat-welded and laid into place according to design, and in turn covered by another clay liner to prevent copper solution losses, as well as to protect the acidic solution from seeping into the ground water system. Each heap is constructed on a slight slope, so that the solution containing the dissolved copper percolates down through the heaps to the liner and flows downhill into a series of collection channels that drain into a system of plastic-lined ponds. The solution containing the highest copper grade is directed into the pregnant leach solution, or PLS pond. The lesser concentrated solution is recirculated back from an intermediate solution pond, or ILS, and onto the heaps to increase the copper concentration. Once contained in the PLS pond the solution is pumped to the Solvent-Extraction Plant (SX) for further purification.

Solution management to and from heap cells is strictly controlled on a daily basis. The foundations of the heaps are constantly monitored and checked for leaks and measures are in place to pump out any stray solutions from beneath the HDPE before they have any opportunity to breach the protective clay base barriers. This design methodology not only protects the environment from potential impacts, but it also protects MYTCL’s liquid assets of the solution bearing precious copper from being lost.

The dimensions of each heap leach cell is 700 metres long and 80 metres wide, and is able to stack about 360,000 MT of ore at a four metre height, and about 500,000 MT at six metre heights. These cells are combined into Heap Leach Pads for identification and quality management purposes.

The Allis-Chalmers 42-65 Superior Gyratory Crusher was erected by Svedala Arbra A B, Sweden when the S&K Project was first established. In 2016 the Primary Crusher system and the entire conveyor lines were dramatically renovated and extended in order to improve the rate of recovery from the Kyisintaung ore. Particle size is essential when utilising the environmental and naturally enhanced methodologies of Bio-Heap Leaching.
SOLVENT EXTRACTION AND ELECTROWINNING: SX-EW

Solvent Extraction involves the selective extraction of the valuable copper ion from the PLS contact of an immiscible organic phase, which consists of a complex organic extractant dissolved in high-flash point kerosene. These two types of solution are stirred and allowed to naturally separate along a settler due to their different specific gravities. From this stage the copper is stripped from the loaded organic phase by highly acidic electrolytes to produce an enriched electrolyte known as strong electrolyte. The remaining low-copper aqueous solution from the extraction stage, called raffinate, now high in acid content is recycled to the leach cells to recover more copper while the strong electrolyte is sent to the tank house for electrowinning.

The cathodes are stripped basically every seven days, with each copper-laden cathode weighing approximately between 48-52kg as per the London Metal Exchange (LME) market standard. These sheets are washed with hot water, sampled, weighed and bundled for shipment. Sampling is being carried out on an 80tonne/lot basis, and analysis is completed at offshore and local laboratories for LME quality control.

MYTCL produces cathode copper that complies with LME Grade-A rating, and is more than 99.99% in purity.

In 2016, both Tankhouse-A and Tankhouse-C were successfully managed to meet their maximum design outputs of 25,000 tpa each for the first time since operations commenced.

New technologies are currently in experimental stages to reduce any acid-mist emissions and to safeguard employees from over-exposure.

Each copper bundle is weighed at just over 2 tonnes and identified with the MYTCL logo and LME registration.

About MYTCL

99.99%

Tankhouse-C operates an automated cathode removal system that eases the heavy workload for Plant Operators.

Copper can truly be cited as the ‘green’ metal both for its role in protecting the natural environment through its use in energy-saving applications, and for the achievements that have been realised in the production of the metal in an environmentally sound manner.

Copper ore pile

LEACHING

COPPER EXTRACTING

COPPER STRIPPING

ELECTROWINNING COPPER CATHODE

RAFFINATE

STRIPPED ORGANIC

SPENT ELECTROLYTE

PUMPS

PREGNANT LEACH SOLUtION

LOADED ORGANIC

STRONG ELECTROLYTE

GRID DISCHARGE

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The population of Mine Town is just under 3,000 inhabitants, with 28% being directly employed by the S&K Project. Established in the mid 1990’s as part of a joint venture, Mine Town operates as a small business community as well as home to many of the MYTCL employees. A public school is also supported in the town by the Ministry of Mines. Today, the town is managed and under the care of MEHL, while MYTCL donates and supports infrastructure and maintenance upgrades when requested.

In the midst of the mining activities there are both internal and external areas where biodiversity is maintained and monitored. Migratory birds and indigenous wildlife make these areas their home, increasing in numbers due to the protection naturally offered by the location of the wetlands and the reforested areas. Within the mine lease outsiders are not permitted to enter and hunt. These lands will be extended in the future as part of the mine closure phases to propagate protected and environmentally managed areas.

Sabetaung and Sabetaung South Mine were the primary twin pits exploited since the early 1900’s. In 2014 they were completed and are now part of a complex closure program that will enable the pits to be safely backfilled and then encapsulated, using engineered technologies to ensure the safety of the surface and subterranean environments far into the future. By completing this activity, MYTCL is intelligently reducing its environmental footprint within the lease area and reverting the mine back to a more sustainable and diverse environment for the region.

The Kysisintaung Mountain is currently under production and will be the final phase of the Life of Mine for Copper Ore extraction within the S&K Project lease area. Acid waste rock from this mine will be deposited into the Sabetaung pits, while the non-acid forming waste will be stockpiled in preparations for the progressive closure programs. Once rehabilitated, the Kysisintaung Waste Dump will extend the Twin Peaks Wildlife Conservation areas.

The S&K Mine Site is a unity of domains, each serving a specific function during the mine operations. Designed from conception to be closed, or decommissioned in a particular manner, and as much as possible to reduce the environmental and social impacts caused by its extractive activities, this satellite image and descriptions of the domains illustrate the cohesive planning and successes to date of the movement towards progressive closure.

The Heap Pads compose the largest of the land mass required in this type of extractive mining. Facilities associated with the Heap Pads are the Process Plants, the Fine Screens Tailings Storage Facilities, the Storm Water Ponds, Conveyors and the Primary and Secondary Crusher Systems. Upon closure all of these facilities will be encapsulated, buried, modified for sustainable ecologically recovered systems, or for alternative social purposes after land relinquishment.

This area is preserved by MYTCL for the natural wildlife that is displaced through mining activities, and to provide an area of conservation and future reestablishment of the indigenous flora and fauna of the region. Foraging on the foothills of these mountains are many small fauna such as the Dhole and the Barking Deer. Evidence collected by environmental specialists indicates that there are also a number of the rare Eld’s Deer present on the mountain-sides, despite the increasing populations of the nearby villages.
INVESTING in HUMAN CAPITAL

Of all the HR disciplines, the employee relations discipline has the broadest reach. Human resources leaders generally have a common goal: to strengthen the employer-employee relationship. An effective way to strengthen the relationship is through a well-constructed performance management system. Employees need feedback. They need to understand MYTCL’s expectations, and we at MYTCL have an obligation to provide employees with the tools necessary to achieve high performance. Within the context of MYTCL’s HR best practices, performance management comprises job descriptions, performance standards, continuous feedback from supervisors and regularly scheduled performance appraisals. Moving forward into 2017 HR will take on a new and more defined approach to strategic planning.

"Choose a job you love, and you will never have to work a day in your life" - Confucius -

The Human Resource Department is charged with many functions, but perhaps their most fundamental purpose is their direct engagement with every employee.
WITH THE ADMINISTRATION, TRAINING AND HR DEPARTMENT MANAGER

MYTCL understands the true value of professional development, culture, innovation and creativity within the workplace, and also recognises the value of continuously educating our employee base.

Mr. Shi Jian Feng, or Mr. Henry as he is commonly known amongst the Myanmar people, has been assigned with the responsibility of developing the Administration, Training and Human Resources Department.

“I’ve been employed by MYTCL for one and ½ years now, with 2016 dedicated to the fulfilment of HR strategic development. It’s been a year of hard work for my department, but we have seen successes that we have never achieved before as a company here in Myanmar.”

Describe some of the most crucial and constructive achievements that MYTCL has made during the past year. “Without hesitation I believe that the greatest achievement was our ability to recruit such a great number of qualified employees for the critical areas of Mining and Process from educational centres such as Mandalay and Yangon, as well as the majority of new employees from the nearby communities. It is our belief that together with the development of our company we will bring more benefits and economic opportunities for the villagers in our area. Without this accomplishment of meeting human capital requirements we would not have been able to attain the year’s production targets and objectives.”

What were the challenges that the Admin & HR teams faced in 2016? “Most of our experienced staff are in their mid to late 40’s, and a great number even older. For a long-term company such as MYTCL this becomes a challenge of retaining the organisational knowledge - that’s what we refer to as the knowledge that comes from a wide variety of personal experiences. We have a majority of new staff within the whole organisation and training becomes the primary challenge for the Administration, Training and HR Management. But it is a challenge that we are meeting head-on.”

The MYTCL HR strategy acknowledges that by providing individual development we will be better positioned as a company to enhance our internal growth. For the employee this also means that they gain significant security within the organisation as they are enabled to adapt and grow within the MYTCL work environment. Incorporating professional development within the overall corporate strategy is the challenge we offer all MYTCL employees.

What experiences and lessons have you learned from 2016 that you can carry in 2017 planning? “In 2016 we took steps forward that have never been attempted before in terms of rewarding and recognising our talented and hard-working employees. We have held inspirational events such as an English Contest for all our employees and delivered special awards for outstanding performance in our Mining Department. The MD also presented personal awards to the individuals who were part of the success of repairing the TH-B Plant and putting it back into production. And then of course, we presented awards to all departments for the early production target victory of 50,000tpa in 2016. These first time awards have been received with a positive response from our staff.

Besides presenting awards we took a closer look at the method we promote people and the decision-making process that we previously followed. We began more of a 360° methodology of getting other managers, supervisors and colleagues’ opinions of an employee during the promotion process. This will improve our processes of achieving a fair judgement of each individual.”

“*For 2017 we are looking at 3 critical tasks. First we would like to improve our Admin, Training and HR software systems to enhance our competency and quality management to a more professional level. Secondly, we will pursue through the Training Division a more comprehensive program to include basic training such as English, fire, first-aid and the essentials. Then escalate this to include vocational training for engineers and the more skilled labourers. Finally we have a great need to strategically develop our senior management teams with professional training in areas such as time management and human resources.*

Do you have any HR advice for the leadership teams of MYTCL? “My boss once told me that managers should always have an exit strategy. Because if (fingers crossed) you receive a promotion or new position, you’ll need to have a plan in place for your departure, including a solid suggestion for someone to fill your role. And that means you need to be preparing your employees for leadership now. Of course, being a manager isn’t all about you. It’s important to instil leadership skills in your employees for the good of their careers, too. When they’re equipped with management skills, they’ll be able to make informed decisions, guide their peers (and eventually their direct reports), and be better qualified for opportunities that come their way. But, developing your employees into leaders isn’t an instantaneous shift, so it’s important to start now. I encourage our HODs, our Supervisors, our Consultants and especially those who are trying to be promoted or increase their career opportunities to listen to these HR strategies that are vital to start developing the skills that will benefit those who are leaders, and their employees.”

1. Give Them the Right Experience

As you dole out projects and assignments, give some thought to the unique duties you have as a manager. These are the skills that your employees may not be familiar with, but should be if they aim to move up within the organisation. Then, find ways for your employees to start gaining experience in those areas.

2. Allow Them to Struggle a Little

When an employee needs help with a task, he or she typically comes to you, so you can either take over or provide the resource that will help accomplish the task. And in most cases, fulfilling that managerial duty is perfectly fine. But when you’re coaching your employees to become leaders, many have discovered that it’s beneficial to push them to figure out how to get what they need... on their own.

3. Be a Mentor

As you’re helping your employees gain leadership skills, you’ll likely take on a mentor-mentee relationship with them. And this natural progression is a very beneficial tool to continue honing their leadership skills... so use it to the fullest.

4. Create an Ownership Mentality

Most importantly, you can coach people in leadership day after day, but they won’t actually use those skills unless they feel like a trusted, valued, and impactful part of the company. Think about it: If you teach your employees how to make smart, informed decisions, but still require that they run every idea by you before they’re allowed to make a move, how empowered will they feel?
KEY ELEMENTS OF HUMAN RESOURCES in 2017

It is vital to understand the key elements of HR.

Because no matter how good or successful you are or how clever or crafty, your business and its future are in the hands of the people you hire.

MYTCL understands the importance of hiring the right people to succeed.

1. Selection and Placement - The Right People in the Right Job

In 2016, the HR and the Training Department’s search for talent began to become an increasingly refined and defined selection for talent, and a placement program has been established. This means partnering with universities, establishing apprentice programs, creating developmental assignments, and focusing on internal growth. MYTCL will enrich the emphasis on continuous learning in 2017 with the intent of attracting the best and building internally for the future.

2. Job Design - Redefining Employee Engagement and Career Development

Job Design refers to the process of combining tasks to form a whole job. When planning jobs or assigning people to jobs, HR managers also consider training (ensuring that employees have the knowledge and skills to perform all parts of their job) and giving them the authority and accountability to do so. HR itself is changing dramatically and we need to continuously increase the skill of our own teams to maintain our relevance and value. HR isn’t all about paperwork and filing systems. It’s about training the people as well as the trainers.

3. Compensation and Rewards - Restructuring Performance Management

One of the most talked about key element of HR includes evaluating and paying people on the basis of their performance, not simply for showing up to the job. Our work environment at MYTCL management practices, benefits and recognition programs, career development, and corporate mission all contribute to engagement. As we move forward to seek to attract and grow long-term employees, we will re-imagine employee engagement in a new, integrated way. And rather than survey annually during the review process, we will develop new tools that will allow us to monitor engagement continuously. The performance review is slowly making changes to engage our employees on a higher and more personal level. In 2017 MYTCL will aggressively enforce the redesign of our appraisal and evaluation programs to focus on coaching, development, continuous goal alignment, and recognition.

4. Diversity Management - Recognising the Value in People and their Own Experiences

At MYTCL diversity management involves actively appreciating and using the differing perspectives and ideas that individuals bring to the workplace. Diversity is an invaluable contributor to innovation and problem-solving success. The more diverse the group in terms of expertise, gender, age, and background, the more ability the group has to making sound decisions. Diversity helps company teams to come up with more creative and effective solutions. Teams whose members have complementary skills are often more successful because members can see one another’s blind spots. Diverse people will probably make different kinds of errors, which also means that they’ll be more likely to catch and correct each other’s mistakes. MYTCL aims to attract a diverse workforce and to remain committed to respecting the various differences which exist among our people, while also recognising the benefits which come from a diverse workforce. MYTCL’s policy on fairness, respect and diversity of employment guides our people on the importance of maintaining a work environment that is inclusive and offers opportunities to all people based on merit.
မြန်မာစိုက်ပျိုးရေးအုပ်စုမှ အဝေးပေါ်တွင် ရှိးကြောင်းသော စုစုပေါင်းကောင်းမှုကို ဆောင်ရွက်နိုင်စေရန် အထောက်အကူပြုစုချက်များကို တည်ဆောက်အောင် တတိယ လုပ်ဆောင်ခွင်များကို အောက်ကြီးကို လုပ်ဆောင်ပါသည်။

စုစွဲအောင် အခြေခံသော စီးပွားရေးတွင် စွမ်းရှောများကို ကြံ့ချိန်များကို ယခု ဆွဲဆောင်နိုင်ရန် အောက်များပါဝင်စေရန် တောင်းဆိုသည်။

တော်လှင်အောင် ကြောင်းစီးပွားရေးတွင် စွမ်းရှောများကို ကြံ့ချိန်များကို ယခု ဆွဲဆောင်နိုင်ရန် အောက်များပါဝင်စေရန် တောင်းဆိုသည်။

မြန်မာစိုက်ပျိုးရေးအုပ်စုမှ အဝေးပေါ်တွင် ရှိးကြောင်းသော စုစုပေါင်းကောင်းမှုကို ဆောင်ရွက်နိုင်စေရန် အထောက်အကူပြုစုချက်များကို တည်ဆောက်အောင် တတိယ လုပ်ဆောင်ခွင်များကို အောက်ကြီးကို လုပ်ဆောင်ပါသည်။
FINDING THE BALANCE WITH THE ADMINISTRATION, TRAINING AND HR SUPERINTENDENT

Daw Thi Thi Oo is one of the permanent fixtures of the MYTCL organisation with over 18 years of service at the S&K Project. Along with another 500 employees that were absorbed from the previous Ivanhoe mining enterprise, Daw Thi Thi Oo has maintained her previous career and made her way up the ladder of success. Now she is determined that her goal at MYTCL is to see that others have equal opportunities to achieve their own personal goals.

“At MYTCL we maintain a commitment to our employees to ensure a safe and rewarding workplace, and one which also encourages their personal development.”

What was your primary goal in 2016, and did you achieve these goals? “The HR Division ultimately has the responsibility of fulfilling all of the other department’s requirements when it comes to human capital. So, in a matter of speaking, if we are not successful then it is all of the departments that suffer. This makes our role within the organisation a very critically important one. In 2016, we not only achieved our corporate goal of production, but we also completed the requirements demanded of HR, Admin and Training to make that goal happen. Without the right people in the right place and without the proper training, we could not have done what we did in 2016. The skill levels of our employees are not perfect, but we have a system that works and it will generate building blocks where the people are in need of improvement.”

MYTCL Organisational Strength - December 31st 2016

<table>
<thead>
<tr>
<th>Department</th>
<th>Expatriate</th>
<th>Permanent</th>
<th>Contract Employee</th>
<th>Casual Labourers</th>
<th>Department Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine</td>
<td>6</td>
<td>107</td>
<td>470</td>
<td>80</td>
<td>664</td>
</tr>
<tr>
<td>Heavy Workshop</td>
<td>3</td>
<td>59</td>
<td>133</td>
<td>21</td>
<td>218</td>
</tr>
<tr>
<td>Engineering</td>
<td>1</td>
<td>7</td>
<td>45</td>
<td>20</td>
<td>73</td>
</tr>
<tr>
<td>Maintenance</td>
<td>2</td>
<td>97</td>
<td>105</td>
<td>29</td>
<td>233</td>
</tr>
<tr>
<td>Process</td>
<td>7</td>
<td>84</td>
<td>133</td>
<td>69</td>
<td>253</td>
</tr>
<tr>
<td>Tankhouse-C</td>
<td>42</td>
<td>160</td>
<td></td>
<td></td>
<td>202</td>
</tr>
<tr>
<td>Management</td>
<td>7</td>
<td>5</td>
<td>47</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>1</td>
<td>14</td>
<td>33</td>
<td>4</td>
<td>52</td>
</tr>
<tr>
<td>QHSE</td>
<td>1</td>
<td>14</td>
<td>21</td>
<td>16</td>
<td>52</td>
</tr>
<tr>
<td>Security</td>
<td>19</td>
<td>177</td>
<td>97</td>
<td>253</td>
<td></td>
</tr>
<tr>
<td>PR &amp; CSD</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Accounting</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Yangon</td>
<td>3</td>
<td>47</td>
<td>28</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>501</td>
<td>1360</td>
<td>337</td>
<td>2,233</td>
</tr>
</tbody>
</table>

2017-18 looks to be another exciting and critically important years for the Admin & HR Division. The company will evolve, employees will be in charge of their own career potentials, and HR’s role in business success will be more important than ever. The growth that has begun will cease through the coming years, but step by step, and milestone by milestone MYTCL will encourage, reward and share the benefits of success with our employees. In 2016, 154 employees received promotions and 63 casual Labourers were invited to Contract status. Turn-over rates continue to be at an incredible low due to life-long commitments from employees and employer. Human Resources and management collectively administered to fulfil the needs of critical areas of operations, culminating in 221 new staff hires: more hires in 1-year than ever before in the history of the S&K Project.

For the first time MYTCL has rewarded staff for excellent contributions towards achieving an early maximum production target of 50,000tpa. What do you think about this award? “This award ceremony inspired our staff, and I think it will make them work even harder in the future to achieve the next target. For me, I too was honoured with this award. It’s not about the prize money, but more about the fact that the leaders took the time to recognise me and the others for the extra hard work that we committed to the Company. To be personally thanked for doing that was the most important part to all of our employees, in my opinion.”

What does the title of the Sustainability Report: Verifying the Balance mean to the HR Division? “I think that this title is a perfect fit for what we have done over the past year and where we are going in this next year. MYTCL has made every attempt to show the employees, the government and the communities around us that we are doing what we say. Now, in this report you will see that people from inside the Company, and from our region, are talking about the Company actions and verifying that we are achieving our goals in every aspect, from human rights all the way through to environmental sustainability. For HR, Verifying the Balance is clearly a Key Performance Indicator for our department, as I know it is for all the others. According to our international ISO standards, we must meet all of the requirements. This includes the human elements that are essential to HR. Transparently showing all of our stakeholders that we will maintain throughout our programs for all levels.”

Do you have any HR advice to share with the employees of MYTCL? “Yes I do. I have a boss right now that is constantly telling me to find the balance between my work life and my home life. I would like to share this message to all of our employees. We live so close to our work that sometimes they are 2 in the same. This can lead to an unhealthy life. I encourage all employees to take their holiday leave and enjoy the time off that they have earned. Don’t forget to eat properly, pray, and be a part of your family when you are away from work. Remember that work will always be there when you return. This will allow you to put all of your efforts into your job when you are there. Work hard for the Company and the Company will work hard for you.”
ဤကြိုးတွေကို MYTCLမှာတော်မှာ ဖော်ပြထားပါတယ်။ ရွေးချယ်မှုများကို ရှင်းလင်းပေးရန် မိုးမိုးခဆောင်ရွက်ခြင်း အားလုံးတွေကို စိတ်ချရင်းပေးပါတယ်။

- "HR ရှင်းလင်းပေးမှုနှင့် ဆောင်ရွက်ခြင်းများနှင့် ရွေးချယ်မှုများကို အလုပ်သမားများကို ဆောင်ရွက်ခြင်း များကို ဖော်ပြပေးပါတယ်။

အခွင့်အရေးအနေဖြင့် အလုပ်သမားများကို ဖော်ပြပေးပါတယ်။

Turn-Over Rates & Causes (2.7% for 2016)

<table>
<thead>
<tr>
<th>Department</th>
<th>Decased</th>
<th>Resigned</th>
<th>Retired</th>
<th>Terminated</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Heavy Workshop</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Engineering</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Services</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Maintenance</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Process</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Tankhouse-C</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td></td>
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<td></td>
<td>1</td>
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<tr>
<td>Supply</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>QHSE</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>5</td>
</tr>
<tr>
<td>Security</td>
<td>1</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>PR &amp; CSD</td>
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<td></td>
<td></td>
<td>0</td>
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<tr>
<td>Accounting</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Yangon</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>5</strong></td>
<td><strong>9</strong></td>
<td><strong>2</strong></td>
<td><strong>1</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

MYTCL ဗုံးတွေကို ဖော်ပြပေးပါတယ်။ အောက်တွင် ဖော်ပြပေးထားသော အခွင့်အရေးအား ဖော်ပြပေးပါတယ်။
It was November 24th, 2016 that MYTCL made history for the organisation. Culminating in a year that took the efforts of every employee, and that was enhanced through the Managing Director’s hands-on approach to optimising and resourcing strengths into areas where they were needed most. On this day Mr. Zhang Yupeng, MD & Chairman spoke the following words of inspiration and gratitude to a group of selected excellent achievers for the accomplishments leading to this early annual goal:

“Last year we were not able to achieve our maximum production goals, and you all worked so very hard. But this year… this year you have won a historical battle and overcame our past attempts and delivered 50,000 tonnes. Our various departments united and worked together to achieve today’s results, which reflects our strong wills and spirited teamwork. I express my sincerest of thanks to you all on behalf of Yang Tse management and Wanbao Mining Ltd in Beijing. I truly believe that we will achieve even more brilliant goals such as this in our future!”
The MYTCL Integrated Management System (IMS) is based on three key certifications and modelled using a variety of other international and corporate principles. The foundations of this system are reliant on the structure and format of ISO 31000 Risk Management, which in turn incorporates the following certified standards into a unified document; ISO 9001:2008, OHSAS 18001:2007 and ISO 14001:2004.

The correspondence between these international standards is cohesive and is applied to all MYTCL operational activities of Mining, Crushing, Stacking, Heap-Leaching, Solvent Extraction and the Electrowinning process of Cathode Copper, including Shipping and Marketing. The IMS has been developed and established as a ‘living document’ to be used for guidance in all operational matters. Its implementation and maintenance will result in improved safety, environmental and quality management performance and business profitability within the operation. All other management systems utilised by MYTCL, such as ISO 26000, are consistent with the Integrated Management System’s methodology and constitution. As part of the living document process, MYTCL will periodically review and evaluate the IMS in order to identify opportunities for improvement, and to ensure that it remains relevant.

The IMS provides a framework for the achievement of continual improvement, the rate and extent of which will be determined by MYTCL Management in the light of corporate, economic and legal requirements. Although some improvement in safety, environmental and quality performance can be expected due to the adoption of a systematic approach, the IMS will primarily be used as a tool that will enable MYTCL to achieve, and systematically control an improved level of management performance.

The IMS System clearly sets out the standards we require our people to meet. Managers and supervisors are required to provide leadership in relation to the IMS by:

- Effectively implementing the requirements of the standards
- Developing and sustaining a strong culture of working safety and continuous improvement
- Setting stretch improvement goals
- Allocating sufficient resources to achieve the goals

There are three primary drivers behind MYTCL’s Integrated Management System:

1. Protect the health and safety of people by providing a safe place of work and safe systems of work.
2. Operate within the law.
3. Ensure people know their IMS responsibilities and how they are to be met.
MYTCL’s purpose of integration and implementation of management systems by integrating standards and documents is in the achievement of their synergistic action in the organisation. Standards are intended as living documents in order to reflect progress in science, research, technology and systems. In other areas, they are useful especially for those who do not know how to do something, but also serve well to those who know how to do it, but want to make sure that they are doing it correctly, or even better than prescribed by the standard. At the same time, standards promote and unify communication.

In particular, the ISO standards positively contribute to the running of the world we live in (ISO 26000:2010 Social Responsibility). They ensure vital features such as quality, ecology, safety, reliability, compatibility, interoperability, efficiency and effectiveness. They facilitate trade, spreading of knowledge and sharing of technological progress, good management and leadership practices, thereby fortifying the MYTCL organisation.

These management standards served as the model for setting up the MYTCL organisation at its establishment and operations from 2011 for initial certification. This model then developed through the years, and today includes features on which experts in the area arrived to a consensus according to how knowledge and international state of the art methodologies evolved. Our primary objective is to establish and optimise an integrated management system, which guarantees ongoing improvement within all divisions and activities in observance of the management principles and management targets set out. The careful orientation of our business processes to market and customer demands is a key element.

We also focus on intensive training and information of all staff with a view to ensuring a common understanding of processes and safety, and to engendering appropriate behaviour. A properly formulated and documented integrated management system can only be implemented and be capable of laying the foundation for common corporate success provided this aim is achieved.

We have created an IMS Manual, which is also intended as an information tool for our stakeholders.

"It is our avowed intention to comprehensively and openly disclose the present development status of our integrated management system and to detail existing potential for improvement, since only by doing so can we achieve our target of comprehensive improvement management."

Our top management checks regularly the compliance with quality and environment policies, their targets as well as the efficiency of quality, safety and environment management systems.
When we decide what to do, and how and when we should act, we can never be sure that we will be successful. Even if what we want to happen does happen, it is only later that we find out if the decision we made was the best one in terms of enabling us to achieve our personal goals and objectives.

We all manage risk, every day and all day, as we make decisions. Mostly, this is intuitive and we cannot prevent ourselves from doing it every time we decide how to act. That is not to say that we cannot improve the way we manage risk to ensure that our decisions are more reliable and that we increase the certainty that we will achieve our goals and objectives.

When it comes to our organisation, the way people who work for us understand and deal with risk links directly to our actual and perceived success. Decisions have to be made that always support and facilitate the achievement of our organisation’s objectives, and this requires approaches that encourage more consistent and coherent decisions.

ISO 31000 emphasises the close association between the process for managing risk and those used for making decisions – at all levels and for all aspects of an organisation. The clear (and correct) impression is given that risk management is only the means to an end and not the end itself: its sole purpose is to support decisions that lead to the creation of value, however this is measured.

"The effect of uncertainty on our objectives is what we call risk."

The principles, framework and process management of the ISO 31000 practices ensure that information about risk is adequately reported and used as a basis for decision making and accountability at all relevant levels within the MYTCL organisation.
အဆင့်အတန်းအလိုက် အားလုံးတို့အားဖော်ပြရန် များသော ပို၍သင့်လာလားဖြယ္ျဖစ္ေသာ အစီအစဥ်တစ်ရပ္မွ အႏၱရာယ္မ်ားကိုအမ်ိဳးတန္ဖိုးခ်င့္တြက္ထားေသာ မွတ္ပံုတင္ထားၿပီးလည္းျဖစ္ပါသည္။ Hierarchy ဟု အႏၱရာယ္မ်ားကို ထိန္းခ်ဳပ္ရန္ နည္းလမ္းအႏၱရာယ္အမ်ိဳးအစား ခြဲျခားသတ္မွတ္ျခင္းႏွင့္ အႏၱရာယ္ကို ဆန္းစစ္ျခင္း (HIRA) လုပ္ေဆာင္မႈအဆင့္ဆင့္ကို ေဖာ္ထုတ္ေလ်ာ့ခ်သြားရန္ စဥ္ဆက္မျပတ္ တြန္းအားေပးေနပါသည္။ မေတာ္တဆထိခိုက္မႈမ်ားသည္ ႀကိဳတင္ကာကြယ္ထားႏိုင္ၿပီး ေနေသာ လုပ္ငန္းခြင္ဆိုင္ရာ က်န္းမာေရးႏွင့္ေဘးကင္းမႈရွိေသာ အႏၱရာယ္မ်ားကို ထိထိေရာက္ေရာက္ စီမံခန္႕ခြဲရန္ႏွင့္ ဝန္ထမ္းမ်ားသည္ MYTCL ၏အႀကီးမားဆံုးေသာ ပိုင္ဆိုင္မႈတစ္ရပ္ျဖစ္ၿပီး MYTCL ၏လုပ္ေဆာင္ခ်က္မ်ားႏွင့္ ဆက္ႏြယ္ပို၍ အဆီအေငၚတည့္ၿပီး တသမတ္တည္းမေျပာင္းလဲေသာ ဆံုးျဖတ္ခ်က္မ်ားကို အားေပးအားေျမွာက္ျဖစ္ေစမည့္ ခ်ဥ္းကပ္ရည္မွန္းခ်က္မ်ား၏ ေအာင္ျမင္မႈကို အၿမဲပံ့ပိုးၿပီး၊ လိုအပ္သည္မ်ား ျဖည့္ဆည္းေပးသြားရန္ ဆံုးျဖတ္ခ်က္မ်ား ခ်မွတ္ရပါမည္။

ကြ်န္ေတာ္မ်ားအမွန္တကယ္ သိရွိထားသည့္ ေအာင္ျမင္မႈႏွင့္ တိုက္ရိုက္ဆက္စပ္ပါသည္။ ကြ်န္ေတာ္မ်ားအဖြဲ႕အစည္း၏ မွန္းခ်က္မ်ားႏွင့္ ပန္းတိုင္မ်ားကို ေအာင္ျမွင့္တင္သြားရပါမည္။
THE RISK MANAGEMENT FRAMEWORK AND DESIGN

The framework design takes into account:

- Understanding of the organisation’s activities and its context;
- Establishing a risk management policy;
- Defining accountabilities;
- Integration into organisational processes;
- Provision of adequate resources to maintain the framework; and
- Establishing internal and external communication and reporting mechanisms.

Each area of the Risk Management Framework and Design follow the international Deming Cycle, or most commonly known as the PDCA Cycle. This continuous systematic approach to improvement allows for review and consultation throughout the processes. It also establishes the opportunity for growth and change in areas where new policies or performance mechanisms are implemented.

The PDCA Cycle creates a symbiotic relationship with all of the new ISO systems, and risk management in turn generates a risk-based thinking and process approach within each of the ISO policies.

ISO 9001:2015 and ISO 14001:2015 have adopted this high-level structure (i.e. clause sequence, common text and common terminology) developed by ISO to improve alignment among its International Standards for management systems. Now these new standards support an innovative, simple way of thinking about risk and risk management and are intended to begin the process of resolving the many inconsistencies and ambiguities that exist between many different approaches and definitions.
GUIDING PRINCIPLES OF THE INTEGRATED MANAGEMENT SYSTEM

The management system of MYTCL is based on our quality, occupational health and safety, and environmental policies. The IMS Manual has 3 distinct integrated manuals for these ISO certified areas. Recognition of their primary guidelines allows us to model guarantees that a continuous improvement of our processes is carried on.

This system is maintained and continually improved through the use of the ISO related policies for each certification. Through objectives, audit results, analysis of data, corrective and preventative actions and management review. Each ISO Manual determines the following guidelines and includes the newly designed format of the ISO 2015 version. Based on risk-based thinking and a process approach, our management system is grounded on international strategies.

ISO 9001:2015 Quality Strategies

This International Standard is based on the quality management principles described in ISO 9000:Fundamentals and Vocabulary for the 9001 Standard.

“The descriptions include a statement of each principle, a rationale of why the principle is important for the organization, some examples of benefits associated with the principle and examples of typical actions to improve the organization’s performance when applying the principle.”

The quality management principles are:

- Customer focus
- Leadership
- Engagement of people
- Process approach
- Improvement
- Evidence-based decision making
- Relationship management

The quality of our product is the decisive factor for success. We commit to execute every necessary action to fulfill our customers’ demands at all times and we encourage our employees to achieve these targets. We always engage every member of staff in the continuous improvement process to optimise quality, service, costs and technology. Our staff is aware of the fact that the future of our company and job security can only happen if we are informed, skilled and motivated about environmental protection contingent on their responsibilities. They are required to implement these principles, as well as to fulfill the lawful and official requirements in the context of their particular tasks. The impact of our company and production processes on the environment are checked, audited and if necessary optimised. If new equipment is acquired it should be environmentally-friendly.

Abdication of the use of environmentally damaging resources and production processes

Waste avoidance takes priority over recycling

Recyclability is a precondition for new products

OHSAS 18001:2007 Occupational Health & Safety Strategies

The guarantee of safety at work is an equal business objective between economic interests and the quality and environmental targets. We guarantee that we follow every applicable requirement of safety at work and of health protection and, wherever reasonable and possible, we guarantee that we are above this standard. It is our primary concern to constantly improve the compliance with these requirements. All managers are in charge of, and responsible for the safety at work and for the health of their staff and third parties working in their domains. They are expected to be role models for their staff, and as part of their own responsibilities are to motivate them for the highest safety at work.

Our staff members are our most important asset. We guarantee the greatest possible protection at the workplace by means of technical, organisational and personal safety equipment. We guarantee that we will fulfill the high expectations by concerted efforts for further education of all members of staff. Accidents never happen again. We analyse the circumstances which have caused, or could have caused an accident at the workplace consistently, and we initiate corrective actions.

“Today, 16 years later, a new ISO standard is being developed to replace OHSAS 18001; this standard is ISO 45001. In the new standard there is a stronger focus on the “organization’s context”. With ISO 45001, organizations will have to look beyond their own health and safety issues and consider what the society expects from them, in regard with health and safety issues.”
စိုးရိမ်ပြီး ရွေးချယ်ရေးဌာနအဖွဲ့အစည်းအဖွဲ့ အစိုးရအတွက် အရင်းအမြစ်များကို စိုးရိမ်ပြီး တာဝန်ရှိမှုသို့ ဆောင်ရွက်ပေးခြင်းနှင့်ပတ်သက်၍ ကူညီပေးမည်။

ISO 9001:2015 စုစုပေါင်းချိန်စာရင်း အခြေခံအရာ

"စိုးရိမ်ပြီး ရွေးချယ်ရေးဌာနအဖွဲ့အစည်းအဖွဲ့ အစိုးရအတွက် အရင်းအမြစ်များကို စိုးရိမ်ပြီး တာဝန်ရှိမှုသို့ ဆောင်ရွက်ပေးခြင်းနှင့်ပတ်သက်၍ ကူညီပေးမည်။

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MYTCL အနုံးအတွက် အရေးအနားအောင်လိုက်ရာ စာရင်းအား တာဝန်ရှိမှုသို့ ဆောင်ရွက်ပေးခြင်းနှင့်ပတ်သက်၍ ကူညီပေးမည်။
**FIVE FORMULAS OF THE MYTCL INTEGRATED MANAGEMENT SYSTEM**

**MYTCL’s Integrated Management System (IMS)**

1. **COMMITMENT AND POLICY**
   - Our development and leadership commitments to our Integrated Management Policy (IMP) demonstrate our pledge to improving quality of the workplace, health, safety and environmental performance at MYTCL. It is executed and directed by the Managing Director & Chairman.

2. **PLANNING / စီမံခန့်ခွဲ**
   - QHSE objectives and targets will be determined for each quality, occupational health and safety, as well as environmental issues by the relevant Department Superintendents, Supervisors and the ISO Officer Representatives. MYTCL shall ensure that quality objectives, including those needed to meet requirements for product are established at relevant functions and levels within the organisation.

3. **IMPLEMENTATION AND OPERATION / အေကာင်အထည်းရေး**
   - Effective implementation will ensure that health, safety, and environment focus is maintained on critical activities ensuring:
     - responsibilities and accountabilities are in place and understood at each level of the business; in line with our IMS policy commitments;
     - our people are training to complete the tasks associated with their jobs competently;
     - effective communication and consultation mechanisms are in place;
     - reporting of business activities is in place, including the tracking of key indicators and initiatives;
     - effective identification, assessment and control of workplace health, safety and environmental hazards and their associated risk;
     - control of documentation to maintain its relevance and regular review; and
     - emergency situations are identified and controlled appropriately.

4. **MONITOR AND MEASURE / ဗားပေးချက်မှုချက်**
   - By measuring, monitoring and evaluating IMS performance, MYTCL is able to take preventative or corrective action to improve performance, including:
     - Health assessment and management of appropriate records. MYTCL is increasingly focusing on the fitness and wellbeing of its workforce. As part of this commitment, MYTCL has developed both a Philanthropic Health Care Program through the Mobile Medical Team, as well as inclusive health care opportunities provided to direct family members of employees. A focus on HIV and Hepatitis has also been implemented at every level of employee, from casual labourer to contract employee.
     - Auditing of our systems and tracking of actions to address non-compliances are identified. External auditors inspect MYTCL operations on a cyclical basis to ensure compliance with the IMS Standards, to identify any systemic deficiencies and compliance issues. Internal certified auditors follow the same guidelines as external auditors to identify areas of opportunity on a quarterly basis. 10 site-based and Yangon office internal/external audits were conducted during the year to December 31st 2016. Recommendations from these audits are reviewed, actions developed, assigned to applicable personnel; time framed and monitored to completion.
     - Injury/incident reporting, recording, investigation and corrective actions – to find out what caused the incident and provide an insight to what trends are commonly occurring and need to be addressed.

   By collecting and reviewing this data our safety teams are concentrating on developing initiatives to eliminate these and other causes.

5. **MANAGEMENT REVIEW / ဗားပေးချက်မှုချက်**
   - All parts of MYTCL are required to undertake regular reviews of performance to improve the IMS management system as part of continuously improving IMS performance.

   MYTCL constantly reviews its quality management campaigns, and health and safety progress to ensure it continues to improve across the business, including performance against leading and lagging indicators. Additionally, reviews are conducted of management system audit outcomes to ensure compliance standards are maintained.

   MYTCL’s QHSE performance is afforded the highest priority through formal reporting to the Board of Directors.

The IMS Committee reviews the adequacy of management systems and performance, ensures that appropriate improvement targets and benchmarks are in operation and monitors potential liabilities, changes in legislation, community expectations, research findings and technological changes. Remedial actions are instigated to ensure targets are kept on track if performance to target falls below the expected requirement. This ensures that MYTCL as an organisation is continually improving our company processes and systems.
In January of 2018, MYTCL began the detailed training that would enable the Company to transition from the previous Standards to the updated models. For MYTCL this is a complex task to achieve the training of all employees to the new Standards, and to ascertain the comprehension of each individual’s roles and responsibilities within the IMS. The program will be accomplished ahead of schedule at the end of year 2017, with an ultimate deadline by the ISO Certification Body of October 2018 for compliance to the 18001 and 14001 Standards. In December of 2017 it is expected that the replacement for OHSAS 18001, the new ISO 45001 will be published and prepared for application. Upon publication, MYTCL has 3-years to comply with this new standard’s guidelines and strategies. Operational Development Management and the HR & Training Department have established a viable training platform to address the educational levels and the diversity of the workforce for the realisation of the 3 new ISOs.

The Managing Director & Chairman has assumed the lead role of assuring that the MYTCL workforce is united in achieving the 2015 and 2017 standards. Supporting the Top Management of the Company, the MD & Chairman has dedicated an Integrated Management Policy – IMP, focused on accountability to the unifying purpose of the IMS. The Managing Director & Chairman has assumed the lead role of assuring that the MYTCL workforce is united in achieving the 2015 and 2017 standards. Supporting the Top Management of the Company, the MD & Chairman has dedicated an Integrated Management Policy – IMP, focused on accountability to the unifying purpose of the IMS.

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These are the IMP commitments that establish the foundations of the IMS:

- complying with the laws, regulations and MYTCL operational policies and standards;
- establishing measurable objectives and targets, recognise and celebrate their achievement;
- identifying, assessing and controlling hazards and impacts, and eliminate or reduce the risk to an acceptable level;
- informing employees, contractors, visitors and the public of these hazards and impacts that may cause potential harm to them; our business and/or our environment;
- identifying, implementing, monitoring and reinforcing the safe behaviours we expect in our business to eliminate unsafe acts and practices;
- providing appropriate workplace health, safety and environmental training to employees and contractors;
- investigating incidents and sharing the experiences with applicable stakeholders to prevent re-occurrences; and
- consulting and communicating with employees to continually improve the workplace health, safety and environmental performance in our workplaces.
MYTCL has legal responsibilities to ensure a safe and healthy workplace. All of our employees also have rights and responsibilities for their own wellbeing and that of their fellow colleagues. This union of shared responsibility is often referred to as

- DUTY OF CARE -

and has proven to be the most effective and progressive manner of enforcing occupational health and safety objectives within the MYTCL work environments. Key Performance Indicators and continual development of integrated systems allow both the employer and the employee to manage a cohesive workplace, where concerns regarding health and safety are always the primary focus.
HEALTH & SAFETY INITIATIVES - OHSMS

With an incident rate far below the recorded worker’s compensation averages of the Australian Continent, MYTCL pushes forward in lowering risks, eliminating serious injuries, and educating safety in a manner that inspires employees to sustain an attitude of ‘Safety First – Job Second’.

This level of success is a direct consequence of MYTCL’s management and employee commitment to maintaining the highest health and safety standards possible. The ultimate goal for our mining organisation is achieving a zero-incident work environment. To that end we devote ourselves to promoting an ingrained workplace safety culture through the training of employees, engaging in risk assessment, measuring our performance, rewarding achievement and dignifying efforts placed on improvements, all the while adopting best practices.

Since January 1st, 2011, an Occupational Health & Safety Management System (OHSMS) based on the OHSAS 18001:2007 standard was introduced at the S&K Project and will be replaced with the standard ISO 45001:2017 and integrate across all new ISO management systems no later than 2020. This implementation effectively assists in international and national legal requirements, while committing to sustained improvement in OHS performance.

SGS reports: “According to the International Labour Organisation, globally, 6,300 workers die every day as a result of occupational accidents or work-related diseases. With statistics for health and safety incidents being reported daily around the globe and 40 different versions of OHSAS 18001 in existence across 127 countries, there is now a need to harmonise health and safety management systems using an international standard. The development of ISO 45001, a new international standard for occupational health and safety, has allowed the introduction of new concepts by strengthening leadership and worker involvement, further reducing potential risks to employees and employers alike, from employee loss and absence through to sustained improvement in OHS performance.

As of January 2017, ISO 45001 has advanced to the Draft International Standard (DIS) stage, meaning national member bodies of ISO are invited to comment on the text of the standard. If the feedback is positive, the adapted document may then be circulated to ISO members as a Final Draft International Standard (FDIS). ISO 45001 will then be reviewed and, if successful, will be published as an International Standard by late 2016/early 2017.

Water resources from the Chindwin River are monitored according to international standards for potable drinking water.
The Document Workflow Structure of the OHSMS

Occupational Health & Safety Management System

The OHSAS 18001:2007 British standard provides MYTCL with the elements of an effective OHSMS that can be integrated with other management requirements and help the organisation achieve better occupational health and safety performance as well as economic objectives.

There are so many aspects to creating and maintaining a safe working environment that sometimes it's easy to get lost in it all. The key elements to maintaining an effective OHSMS is ensuring that everyone understands the components. MYTCL Occupational Health and Safety Management System combines all the different elements in our workplace that need attention to ensure we provide a safe working environment for everyone who enters it.

The Document Workflow of the OHSMS within the IMS Platform

Quite simply, the OHSMS system has six elements embedded within the documents:

- a safety plan;
- policies, procedures and processes;
- orientation, training and induction;
- monitoring;
- supervision; and
- reporting.

The OHSMS systems make health and safety an integral part of our business’s core operations. By designing, developing and implementing an effective safety management system, we have methods for managing reporting, responsibilities, planning and resourcing to create a safer workplace.

In order to actively implement the OHSMS in the MYTCL workplace we continually ensure that:

- workers comply with procedures and instructions;
- workers are appropriately trained; and
- workers are subject to ongoing supervision.

1. Safety Plan:
The MYTCL safety plan is a strategic action plan that forms part of the business plan. It analyses the current and prospective risk for our company and charts how the risks will be eradicated and controlled over a calendar period. This plan will maintain that there is a governance structure within the company that ensures every worker clearly understands their safety obligations (and how to comply) and is accountable to carry out those obligations.

2. Policies, Procedures and Processes:

Policies, procedures and processes include all safety paper infrastructures within our company. This paperwork will describe all safety behaviour, expectations, record-keeping, incident reporting, and incident notification documentation.

3. Orientation, Training and Induction:

Everyone who enters our workplace will receive training on:

- the rules of our company;
- the rules of the site; and
- the rules of the location they are visiting.

The training content will depend on the level of risk the person is exposed to.

4. Monitoring:

Our obligations to monitor our workplace depend on circumstances and need. We always consider the level of risk. The higher the risk, the more frequent and detailed the monitoring needs to be. Other times when monitoring will be necessary include:

- to ensure that all risk has been covered by a new risk assessment that has been carried out due to a change in process, e.g. the installation of new workstations; and
- when an investigation takes place following an incident.

5. Supervision:

The only way to ensure our workers are carrying out their safety obligations is to have adequate supervision. The level of supervision required in our workplace will increase if the level of safety control put in place to reduce a risk is low, i.e. the less effective the control measure used, the higher the level of supervision necessary.

6. Reporting:

The governance structure of our company needs safety reporting at all levels, not just at the board level. Personnel involved in operations must be competent to perform tasks that may impact occupational health and safety in the workplace. MYTCL has therefore established education and training and awareness schemes to ensure that all personnel have the necessary capabilities and skills to perform their tasks safely.

Health and safety competency assessments, including identification of hazards, risk assessments, and the elements of operational control and emergency response are conducted with each employee to ensure that health and safety risks are controlled to prevent harm from occurring.

Contractors and temporary employees make up a large portion of MYTCL’s workforce, especially in project activities. We recognise that the temporary operators and workers may be more at risk of injuring themselves where they are unfamiliar with MYTCL’s operations, and are undertaking non-routine tasks. Therefore, a focus of our efforts is devoted to the establishment of safe work practices focusing on contractors and temporary employees. A standard procedure was developed for incident reporting and investigation with the aim of preventing recurrence within our organisation. Incidents also are classified and analysed for common trends for proactive safety measures to be implemented.

"Our workers need to know what safety looks like – what’s going right and what’s going wrong. This can only occur when they receive safety feedback from the company, e.g., how many hazards were identified, the risk levels associated with those hazards and what control measures were implemented."
Areas of improvement and calculated monitoring included:

- Internal departmental tracking of employee error in PPE management, and of unsafe working practices are now being measured and monitored utilising a KPI methodology to raise safety awareness and reduce injury or safety risks.
- Toolbox Talks and Safety Topics are being recorded and now reported with the intention to improve year after year and to ensure that the cycle of relevant information is current with the on-going mining activities.
- Safety Meetings and Audits are being increased due to the KPI implementation.
- Within the Safety Planning for 2017-18 there will be continued improvement on the previous year’s KPI performance indicators that have been established within each department to account for their performance not only on production, but on how safely their performance was managed.
- The Community & Social Development Team (CSD) also successfully utilised the KPI method to develop a precise Grievance Mechanism in accordance with the community and public consultation guidelines of MYTCL. This KPI will hold great importance by sustaining the transparency and effectiveness of MYTCL’s safety programs for villages and neighbours.
- Human Resources oriented KPI will be established in 2017-18 such as Casual Labourer durations within departments, overtime and fatigue management, and the ever important management of training employees for future promotions and the generation of a sustainable and safety oriented workforce within MYTCL.
- Departmental Loss due to Injury Frequency Rating - LTIFR comparisons and metrics for improvement will be managed in 2017 to increase departmental responsibility in a fair and appropriate manner.
များတွင် ပါဝင်ပါသည်။

တိုးတက်မှုများအတွက် အလုပ်ခွဲထားျခင် ဧရိယာများနှင့် အတိုင်းအတာများျဖင့် ဌာနဆိုင်ရာ ပ်က္စီးဆံုးရံႈးမႈကို ၂၀၁၇ ခုႏွစ္တြင္ စီမံခန္႕ခြဲသြားရပါမည်။

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မ်ားႏွင့္ အတိုင်းအတာများျဖင့် ဌာနဆိုင်ရာ ပ်က္စီးဆံုးရံႈးမႈကို ၂၀၁၇ ခုႏွစ္တြင္ စီမံခန္႕ခြဲသြားရပါမည်။

မ်ားႏွစ့်အတွက် MYTCL အတွက် အတွက် အတွက် KPI များျဖင့် အတွက် အတွက် အတွက် အတွက် PPE စီမံခန္႕ခြဲမႈတြင္ လုပ္သားဝန္ထမ္း၏အမွားႏွင့္ ေဘးကင္းလံုၿခံဳမႈမရွိေသာ လုပ္ကိုင္ေနသည့္ အေလ့ 

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**LOST TIME INJURY FREQUENCY RATES (LTIFR)**

Worker Safety is the primary KPI where achievements and improvements are measured and monitored. In order to have some measure to benchmark the MYTCL mining operations safety performance we have chosen to utilise the averages from the Australian Workers’ Compensation Board. Annually this board publishes the country’s performance by industry. Comparing our targets and averages against those of Australia gives this KPI value and weight when it comes to judging safety performance at MYTCL. The metric of Lost-Time Injury Frequency Rate (LTIFR) is the standard KPI used, and a target of 1.0 has been set by MYTCL since 2011, while in 2015 a target of 0.9 was fixed to challenge the employees and senior management. This target stands to date.

**DEFINITION OF LOST-TIME INJURY STANDARD**

A lost-time injury is defined as an occurrence that resulted in a fatality, permanent disability or time lost from work of one day/shift or more. This definition comes from the Australian standard: Workplace Injury and Disease Recording Standard (Australian Standard 1885.1–1990), published by Standards Australia.

To date the Industry Standard Average for Metal Ore Mining (Australia) is LTIFR of 5.51

The Workplace Injury and Disease Recording Standard was developed to provide individual workplaces with a guide on how to establish an inexpensive and easy to use method of recording information on work injury and disease. The availability of usable and reliable occupational health and safety data is seen as essential by employers, trade unions and industry associations for the development, monitoring and evaluation of appropriate preventive strategies designed to improve the health and safety of the working population.

The Standard has been developed to satisfy the following objectives:

(a) To provide information on the nature and extent of occupational injury and disease at the workplace.

(b) To provide a comprehensive set of data for the management of occupational health and safety at the workplace and enterprise level.

(c) To assist in the efficient allocation of resources.

(d) To identify appropriate preventive strategies.

(e) To provide data to monitor the effectiveness of preventive strategies.

**CALCULATION OF LOST-TIME INJURY FREQUENCY RATES (LTIFR)**

Lost-time injury frequency rates are the number of lost-time injuries within a given accounting period relative to the total number of hours worked in the same accounting period. The number of lost-time injuries per hour worked is always a very small number. Therefore, for ease of interpretation, a multiplier of 1 million is used and LTIFRs are reported as the number of lost-time injuries per million hours worked. This is calculated as follows and results in a measure of the number of lost-time injuries per hour worked during the accounting period:

<table>
<thead>
<tr>
<th>Number of lost time injuries in accounting period:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st January 2016 to 31st December 2016 (including contractors)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total hours worked in accounting period:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st January 2016 to 31st December 2016 (including contractors)</td>
</tr>
</tbody>
</table>

\[
\text{LTIFR} = \frac{\text{Number of lost time injuries}}{\text{Total hours worked}} \times 1,000,000
\]
In 2016, there were 3 LTI injuries that were primarily due to human error involving crushed fingers, and 1 contractor incident caused by misjudgment and resulted in machine failure. At MYTCL, there was 1 serious injury that occurred due to equipment failure and gave rise to the accelerated enhancements of the Mining Safety Division.

Nevertheless, MYTCL achieved not only its historical target of less than a 1.0 LTIFR, but also has maintained that it is capable of reducing this target year by year. In 2015 the target was lowered as an internal challenge to all employees to 0.90, and an achieved goal of 0.69 was accomplished by the end of 2016.

The Australian Standard is averaged at 5.51 while Mining Services that support the industry within the contractors and construction categories has a rate of 10.83.

### MYTCL LTIFR ACTUAL CALCULATION FIGURES FOR 2016

<table>
<thead>
<tr>
<th>Month</th>
<th>Worked Hrs.</th>
<th>L.T.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-16</td>
<td>562,097</td>
<td>0</td>
</tr>
<tr>
<td>Feb-16</td>
<td>548,823</td>
<td>0</td>
</tr>
<tr>
<td>Mar-16</td>
<td>578,887</td>
<td>1</td>
</tr>
<tr>
<td>Apr-16</td>
<td>478,908</td>
<td>0</td>
</tr>
<tr>
<td>May-16</td>
<td>766,888</td>
<td>0</td>
</tr>
<tr>
<td>Jun-16</td>
<td>785,352</td>
<td>0</td>
</tr>
<tr>
<td>Jul-16</td>
<td>773,223</td>
<td>0</td>
</tr>
<tr>
<td>Aug-16</td>
<td>842,047</td>
<td>1</td>
</tr>
<tr>
<td>Sep-16</td>
<td>833,997</td>
<td>2</td>
</tr>
<tr>
<td>Oct-16</td>
<td>816,045</td>
<td>0</td>
</tr>
<tr>
<td>Nov-16</td>
<td>799,572</td>
<td>1</td>
</tr>
<tr>
<td>Dec-16</td>
<td>920,313</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>8,706,152</td>
<td>6</td>
</tr>
</tbody>
</table>

In 2016, there were 3 LTI injuries that were primarily due to human error involving crushed fingers, and 1 contractor incident caused by misjudgment and resulted in machine failure. At MYTCL, there was 1 serious injury that occurred due to equipment failure and gave rise to the accelerated enhancements of the Mining Safety Division.

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The Australian Standard is averaged at 5.51 while Mining Services that support the industry within the contractors and construction categories has a rate of 10.83.
In order to see a little more closely, in 2016 we have added another perspective of injury compared to workforce. This is called the LTI-IR. This incidence rate is the number of lost time injuries and diseases for each one hundred workers employed. This is a Lagging Indicator of the 2016 year’s performance at MYTCL. For 2017, it will be used as a Leading Indicator for health performance KPI, setting the metric and target to improve.

Industry 3-Year Average LTI Incident Rate per 100 Workers - 1.64 LTI-IR

The formula used is -

\[
\text{Incidence Rate} = \frac{\text{Number of LTI}}{\text{Number of workers}} \times 100
\]

In the spirit of striving for continual improvement, new KPI are always being considered to show where the need for extraordinary work is required to improve on factors involving OHS, as well as where reward and recognition should be placed. To highlight the work that departments have illustrated over the years to achieve the LTIFR strategy, we have created a graph to show our recognition to those departments who have accomplished truly fantastic records of LTIFR free days, and we encourage our areas where we have increased probabilities for injury, due to the nature of their work, to continue to strive for the zero-incident work environment goal.

The documentation and public transparency of strategies revolving around these KPI, and other metrics, display that MYTCL has committed this report to the open sincerity of its operations, and to the mitigation of potential health and safety impacts to our employees, our communities and to the overall social environment. Our 2016-2017 Sustainability Report also provides the community with a clear picture of the progress and the planning of MYTCL, which is intended to maintain an inclusive relationship with our neighbours.

This Sustainability Report illustrates quality of life statistics and significant OHS management indicators that have been adopted by MYTCL. It also highlights the strong development of a working environment that is consistent with our core values, in helping our employees to achieve their goals while being trained to work in safe conditions.
If you don’t participate, then your ideas will not be heard. Who knows… the idea that you have may very well save your co-worker’s life or even your own.”

MYTCL recognises that a sustainable workplace is one that is both safe and rewarding for its employees.

In keeping with our current international status as a World-Class Mining Operation, modern technologies expected to improve efficiency and safety, as well as to reduce costs and environmental impacts, are actively sought out and implemented through departments such as the Safety and Environment Research Department and from the Operations Management level.

MYTCL is fully committed to providing in-depth and comprehensive training programs to assist each and every employee in maximising their own potential, all the while developing alongside the international communities.

Safety and Environment learning in every area of operations is a ceaseless array of refresher courses and of attaining modern knowledge.

COMMUNICATING TO ENHANCE WORKPLACE WELFARE

The key to managing safety at MYTCL is through repetitive and open lines of communication, structured safety topics and support from the QHSE Department to focus on up-to-date safety alerts. Safety meetings are an opportunity for MYTCL’s management and our safety department to communicate to employees how they can do their jobs safer and better. Topics discussed in safety meetings may be topics that our employees are familiar with, or topics that they have limited knowledge about.

We encourage our employees to pay close attention to any and all safety topics, even if it is something that they have heard a hundred times, and listen to the information as if they have never heard before.

Information passed on in a safety meeting has a purpose - to stop our employees from being injured, or your ideas will not be heard.

Managing of health performance will be addressed through training and health programs planned to be implemented throughout the year to address the guidelines and any misuse of this benefit. In 2016 there was a mere 2% increase to this health benefit, which can be primarily attributed to the increase in the employee workforce.

<table>
<thead>
<tr>
<th>Department</th>
<th>Permanent Employee</th>
<th>Contract Employee</th>
<th>Casual Labourer</th>
<th>Total</th>
<th>Averaged % of Employees</th>
<th>Medical Leave Time (30 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employee Medical Leave Day</td>
<td>Employee Medical Leave Day</td>
<td>Employee Medical Leave Day</td>
<td>Total Medical Leave Day</td>
<td>Total Medical Leave Day</td>
<td></td>
</tr>
<tr>
<td>Yango</td>
<td>46 132</td>
<td>26 51</td>
<td>0 0</td>
<td>72 183</td>
<td>8%endet</td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>7 7</td>
<td>45 96</td>
<td>20 410</td>
<td>72 512</td>
<td>24%</td>
<td>21%</td>
</tr>
<tr>
<td>HEW</td>
<td>59 487</td>
<td>133 734</td>
<td>21 0</td>
<td>213 1,221</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Maintenance</td>
<td>97 517</td>
<td>103 462</td>
<td>29 0</td>
<td>229 979</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Management</td>
<td>5 6</td>
<td>46 145</td>
<td>0 0</td>
<td>51 151</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Mine</td>
<td>111 830</td>
<td>463 3,493</td>
<td>81 6</td>
<td>660 4,336</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Accounting</td>
<td>4 3</td>
<td>4 3</td>
<td>0 0</td>
<td>8 6</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>PR-CSD</td>
<td>2 2</td>
<td>4 2</td>
<td>1 0</td>
<td>7 4</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>Process</td>
<td>84 338</td>
<td>131 341</td>
<td>69 274</td>
<td>284 953</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>QHSE</td>
<td>14 70</td>
<td>21 87</td>
<td>16 329</td>
<td>51 486</td>
<td>32%</td>
<td>18%</td>
</tr>
<tr>
<td>Security</td>
<td>20 105</td>
<td>176 831</td>
<td>97 591</td>
<td>293 1,527</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Supply</td>
<td>14 30</td>
<td>33 83</td>
<td>4 0</td>
<td>51 113</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>TH-C</td>
<td>43 99</td>
<td>159 730</td>
<td>0 0</td>
<td>202 829</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,193 11,302</strong></td>
<td><strong>14%</strong></td>
<td><strong>12%</strong></td>
<td><strong>14%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An increase of approximately 2% has occurred in 2016 over 2015.

One key factor that is apparent in the MYTCL health scorecard, as seen in the table, is that fatigue may be a driving force of medical leave as it impacts the Mining and HEW Department at high levels. Where it is clearly apparent that there are health issues to be addressed in the Casual Labourer areas, which have the greatest overall contribution to this health benefit. This may be contributed to general health of the casual workforce as many are aged or generally are poverty stricken villagers with pre-existing health issues working in the open-air conditions of Myanmar.

In 2017 an Occupational Health Officer from the medical service agency of Y.I.C. will assist in determining the root cause of this high range of medical leave, and to assist in improving this KPI.
မြန်မာစာမျက်နာအရာရှိ ဦးချင်း ဦးဆိုင်ဖွံ့ဖြိုးမှု

MYTCL အားလုံးညီ ပြည်သူများ၏ စိတ်ဝင်စာရင်းတွင် ဖော်ပြမည်ရှိ အချက်အလက်များ ပြသော အချက်အလက်ထက်အတွင်း မီးရှိင်း ဦးချင်း ဦးဆိုင်ဖွံ့ဖြိုးမှု အကျိုးအားဖျင်စွာ

တိုတိုက်သည် ကိုယ်တိုင် မီးရှိင်း များ၏ က်ငံး၀တ် ဖော်ပြသည်။ လုပ်ရမည်ကို ပညာေပးျခင္းျဖင့္ လံုျခံဳမႈကင္းေသာ အျပဳအမူမ်ားကို ႀကိဳတင္ကာကြယ္ႏိုင္ေသာ အတိုင္းအတာမ်ား ေပးစြမ္းႏိုင္

ေဘးကင္းလံုျခံဳေရး အစည္းအေဝးမ်ားသည္ လုပ္သားမ်ားအား သူတို႕၏ လုပ္ငန္းမ်ားကို မည္ကဲ့သို႕ ေဘးကင္းလံုျခံဳစြာကၽြန္ေတာ္မ်ားသိသာ ထင္ရွာေအာင္ ေဖာ္ျပထားပါသည္။

ျဖစ္ပြားမႈမ်ားသည္ လုပ္ငန္းလည္ပတ္ ျခင္း ႏွင့္ လုပ္သားဝန္ထမ္းမ်ားအေပၚ ဂယက္႐ိုက္မႈ ျဖစ္ေကာင္းျဖစ္ႏိုင္သည္ကို MYTCL တြင္ ကၽြန္ေတာ္မ်ားသည္ ေဘးကင္းလံုျခံဳမႈ ကိုအထူးအေလးထားေဆာင္ရြက္ရပါသည္။ ထိခိုက္ အနာတရ လုပ္သားဝန္ထမ္းမ်ားအားယခင္မၾကားသိခဲ့သလုိမ်ိဳး ပံုစံျဖင့္ သတင္းအခ်က္အလက္မ်ားကို နားဝင္ေအာင္တိုက္တြန္းရပါမည္။

နားလည္လြယ္ေသာ ဗဟုသုတေဘာင္အတြင္း ရွိရပါမည္။

စဥ္မ်ားလည္း စီမံေဆာင္ရြက္ ထားရပါမည္။ ေဘးကင္းလံုျခံဳမႈ အစည္းအေဝးမ်ား ျပဳလုပ္ျခင္းသည္ MYTCL ၏ စီမံခန္႕ခြဲမႈအႏၲရာယ္ကင္းရွင္းၿပီး လုပ္သားဝန္ထမ္းမ်ားအတြက္ အက်းရွိေသာ ေရရွည္ တည္တံ့ႏိုင္သည့္ လုပ္ငန္း ေသာ အခင္းအက်င္းတစ္ခုျဖစ္ပါသည္။
**FIRE MANAGEMENT & FIRE SAFETY**

Responsible for the protection of all the company assets, the general workforce and their safety regarding fire and fire prevention, the Loss Control-Security & Fire Department has developed a multi-skilled group of individuals to manage these high-level securities. This team is called the ISF & Fire Brigade (Internal Security Force), and it vigilantly manages the Comprehensive Fire Safety Effectiveness Model.

Internal Security Force – ISF & Fire Brigade
The Internal Security Force & Fire Brigade is a dedicated security team allocated to the safety and security of the SX-EW operations, as well as to the fire management of all the other facilities on the S&K Project site. Special training allows these personnel to act as both police of the cathode copper produced on site, and as fire fighters for the safety of the facilities and its staff. Over the course of 2016, this ISF team advanced and organised as an efficient Fire Brigade.

International, as well as continuing regional government fire departmental training has been brought to MYTCL, and professional equipment procured for the operation of this evolving addition to the Security Department. Coordinating with the Fire and Safety Officers from the QHSE Department, it is expected that more internationally based fire prevention standards and milestones will be realised by the end of 2017.

In 2016, the achievement of performing unannounced fire exercises to enhance unusual Standard Operating Procedures was a success, and it led to the evaluation of the ISF & Fire Brigade and their full function. It was determined through Operations Management that the LC,S & Fire Department was in need of a major renovation on the whole, both internally as well as externally. Fire suppression facilities were examined over the course of 2016 and were rebuilt where required. TH-A had a complete new configuration installed to extend the immediate response system to the extremities of the dangerous areas within the SX Plant. Systems were tested and a monthly reporting methodology created to ensure operations were faultless in times of an emergency.

Detail safety features and regulations were implemented such as the restricted use of cell phones and radios in explosive or flammable areas of the Plants. Micro-management of safety became the focal point during 2016 around the Tankhouse structures and within the workforce populations. Due diligence became a workplace phrase. Employees were skilled with safety-conscious thinking, and to always ask themselves…”What if…?”

Towards the end of 2016 a 3rd Party was brought in to enforce the protocol and behaviours of the Security Teams, including the ISF & Fire Brigade. The majority of employees from this department come from the nearby villages, and generally have little education. This training project would provide the teams with some key skills to allow them to stand proud at their posts as an essential component of the MYTCL Company. Operations Management put into motion, with the instruction from the MD, a training program that will change the look and the professionalism of the LC,S & Fire Department as 2017 presses on.

Continual fire exercises and response-time drills improve the Fire Brigade’s effectiveness.

Emergency Response Plan - IMP 08
In the unlikely event that there is a major incident on site, the Emergency Preparedness and Response Plan has been integrated into the IMS and is precisely governed by the Managing Director. An Emergency Major Incident Plan is simultaneously implemented to resolve any such emergency. This plan details responsible persons, reporting procedures and prepared planning to mitigate any such incident.

In line with the ISO 9001:2015, a Business Continuity Plan (BCP) is also prepared to be implemented in the crisis of a disaster that requires immediate corporate assistance in regards to financial reserves and continuity of operations after an event.

With the development of the ISF & Fire Brigade, the Emergency and Major Incident Plan will be enhanced through the support of this team. Plans for 2017 will see the continued and improved integration of the ISF & Fire Brigade into this planning and into the emergency preparedness objectives of the company.
စီမံခန္႕ခြဲသူမ်ားကိုင္ႏိုင္စြမ္းကို ျပသေနပါသည္။ Internal Security Force – ISF & Fire Brigade ၏အျဖစ္ျဖင့း နှင့း အမူအက်င့္မ်ားအျဖစ္ျဖင့် ယင္းသည္ ဌာနတြင္းလံုၿခံဳေရးတပ္ဖြဲ႕ႏွင့္ မီးသတ္တပ္ဖြဲ႕တစ္ခုအသြင္ စည္းရံုေနစရန္တာဝန္ေပးထားသည့္ လံုၿခံဳ စိတ္ခ်ေစရန္တာအျခားေသာ လုပ္ကြက္အား Internal Security Force – ISF & Fire Brigade ဌာနတြင္းလံုၿခံဳေရးတပ္ဖြဲ႕ႏွင့္ မီးသတ္တပ္ဖြဲ႕ရွိသည့္ ျပည့္စံုေသာ ပံုစံအသြင္ျဖင္ ့ႏိႈးၾကားစြာ စီမံ ေဆာင္ရြက္ရပါသည္။

<table>
<thead>
<tr>
<th>Company Attitude</th>
<th>Detection</th>
<th>Intervention Time</th>
<th>Fire Ground Effectiveness</th>
<th>Fire Prevention Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Risk</td>
<td>Suppression Capabilities</td>
<td>Fire Safety Effectiveness Model</td>
<td>Fire Prevention Effectiveness</td>
<td></td>
</tr>
</tbody>
</table>

The Comprehensive Fire Safety Effectiveness Model is composed of seven sub-models.

The overall objective of any fire department is to provide the company and its community with the optimal level of protection from fire and other related public safety hazards while, at the same time, ensuring an appropriate level of health and safety for firefighters. A variety of factors impact on a fire department’s capacity to fulfill this objective, all of which must be considered when determining how the required resources should be deployed. MYTCL has adopted the Canadian Ministry of Safety guidelines as the application process of analysing probable components of fire and the safety risks affiliated with the likelihood of any such emergency.
MINE SITE AND YANGON MEDICAL HEALTH SERVICES

Y.I.C. Medical Services has been providing medical service to S&K Project since July of 1999. Health care is given not only to staff but also to family members, to Mine Town High School, police and army personnel assigned to the mine site, monks and contractors. MYTCL has also established a special service to visit neighbouring villages to assist in our Good Neighbour Program.

The Mine Site Clinic and the Mine Town Hospital are responsible for the medical needs of the Mine Town community, while Yangon Clinic of Y.I.C. Medical Services takes care of our Yangon office staff.

MINE SITE CLINIC

Mine Site Clinic, which is mainly responsible for work-site accidents and for medical evacuations, operates seven days a week from 8:00 AM to 5:00 PM. The clinic doctor is available on-call 24-hours a day for any work-site injuries and emergencies. Vaccinations such as Hepatitis B and Anti-Tetanus Toxoid are some of the regular duties attributed to our employees.

Emergency Response Exercises are also conducted regularly involving different departments.

Medical checks are done on a regular basis. Pre-employment medical examinations are performed on every worker who starts to work for S&K Project. The medical check-ups include a physical examination, recording of height and weight, chest X-ray and blood tests. In addition, yearly medical checks are provided for all workers and biannual medical checks are provided for workers who are exposed to acid mist in the Electrowinning section of the plant.

MINE TOWN HOSPITAL

The 25-bed Mine Town Hospital accommodates the in-patient needs of both MYTCL and the sister mining company of MWMCL. The hospital is equipped with an anaesthesia machine, X-ray machine, semiautomatic blood analyser, dental chair and dental X-ray equipment. There is a Woman’s Ward with a delivery section, a Men’s Ward and a Children’s Ward for the facilities.

The hospital offers treatment to a wide range of people, including families of the workers for emergency care, immunisations and medical checks. Both out-patient and in-patient treatment are provided, as well as major and minor surgeries are performed. In addition, prenatal care for pregnant women, vaccination clinics for children under the age of one as part of the Universal Child Immunization Program, and prevention and control of blindness caused by Vitamin-A deficiency are regularly completed.

In order to enhance the efficiency of patient care, as well as ease of record-keeping for all attendees of the hospital or clinic, upgrades to computer systems and software is on-going for both stationary and mobile facilities. This system allows doctors to treat patients while tracking their history and medicinal records, and allows for more accurate remedies for patients according to data records and medical history.

In January of 2017 a new program was implemented by Y.I.C. as a part of the continual development planning of Operations Management. An Occupational Health Therapist/Officer was added into the Y.I.C. Team in order to visit the mine sites and review the work conditions of the employees, as well as offer any recommendations to improve the work environments. Y.I.C. also commenced technical training for select employees from all departments as part of an intense CPR Training Program. This is a significant addition to the services provided by our healthcare provider, and valuable training that our employees will have in their portfolio of life-saving skills.

MEDICAL SERVICES IN YANGON

Y.I.C. Medical services in Yangon provide free medical health care to office staff of the MYTCL Yangon Office. Pre-employment medical examinations, medical checks, consultations and medicine as well as laboratory testing are also provided.

Clinic Statistics 2016
မိဘာလိုက်မှာ အက္ခရီးဦးစီးခွဲနွေးရေးအဖွဲ့အစည်းအဖွဲ့ဝန်းများနှင့် တာဝန်ထမ်းဆောင်ရွက်မှုကို ဦးစီးသူ၀ှက်၊ ခန့်မှန်းကြည့်ချက်များကို ပံုစံမှုမှန်ကြည့်ရှုးတွေ့အားကို များပြားလာစေရန် ကြိုးစားသောစိတ်ချုပ်မှတ်တမ်းသော လုပ်ငန်းများကို လုပ်ဆောင်သည်။ ထို့ကြောင့် နေရာအားလုံးတွင် ဦးစီးသူ၀ှက်၊ ခန့်မှန်းကြည့်ချက်များအရလုံးစားအားကို များပြားလာစေရန် အထူးတွေ့ရှိမှုများကို ပံုစံမှုမှန်ကြည့်ရှုးတွေ့အားကို များပြားလာစေရန် ကြိုးစားသောစိတ်ချုပ်မှတ်တမ်းသော လုပ်ငန်းများကို လုပ်ဆောင်သည်။

<table>
<thead>
<tr>
<th>Summary of Medical Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>MYTCL Mobile Medical Team</td>
</tr>
<tr>
<td>1 Doctor &amp; 2 Nurses</td>
</tr>
<tr>
<td>MYTCL Clinic</td>
</tr>
<tr>
<td>Doctor for Day Shift</td>
</tr>
<tr>
<td>Mine Town Hospital</td>
</tr>
<tr>
<td>Medical Coordinator/Administrator</td>
</tr>
<tr>
<td>Doctors (1 for 24hr care)</td>
</tr>
<tr>
<td>Staff Nurse</td>
</tr>
<tr>
<td>Nurse Aid</td>
</tr>
<tr>
<td>Lab Technician</td>
</tr>
<tr>
<td>Dentist</td>
</tr>
<tr>
<td>Radiographer</td>
</tr>
<tr>
<td>Ambulance Driver</td>
</tr>
<tr>
<td>Gardener for Hospital Compound</td>
</tr>
<tr>
<td>Office / Admin Staff</td>
</tr>
<tr>
<td><strong>Total Staff</strong></td>
</tr>
</tbody>
</table>

Dr. Tin Aung
Is the on-site Chief Medical Officer for MYTCL & MWMCL

ရှိသော အချက်အလက်များကို မှတ်တမ်းမှု များပြားလာစေရန် ကြိုးစားသောစိတ်ချုပ်မှတ်တမ်းသော လုပ်ငန်းများကို လုပ်ဆောင်သည်။ ထို့ကြောင့် နေရာအားလုံးတွင် ဦးစီးသူ၀ှက်၊ ခန့်မှန်းကြည့်ချက်များအရလုံးစားအားကို များပြားလာစေရန် အထူးတွေ့ရှိမှုများကို ပံုစံမှုမှန်ကြည့်ရှုးတွေ့အားကို များပြားလာစေရန် ကြိုးစားသောစိတ်ချုပ်မှတ်တမ်းသော လုပ်ငန်းများကို လုပ်ဆောင်သည်။
Over the past 5 years, under the management of MYTCL the S&K Project has continued to strive towards maintaining a balanced sustainability of economic success, environmental value and social liability. MYTCL has raised the bar in terms of quality of systems and of communications with villages that may be directly or indirectly impacted by the mining activities. The success of these endeavours undeniably ascertains that developing long-term reciprocated and beneficial relationships between the Company and its key stakeholders is the basis for future success.
FOUR MAIN ENVIRONMENTAL ISSUES HAVE BEEN IDENTIFIED AT THE S&K PROJECT

1. Acid Rock Drainage (possibly released from mine-pit walls and waste dumps)
2. Dangerous goods (hydrocarbon products, sulphuric acid and process reagents waste)
3. Land disturbance (land disturbed by extensive operations)
4. Non-process waste (including rubbish, paper and plastics, rubber and batteries)

In order to ensure ISO Standard 14001:2004 compliance, the following methodologies have been implemented throughout the EMS.

- An Environment Management Program has been developed to control the environmental issues identified above. The program is being actively monitored for potential environmental impacts.
- Results are reviewed for any trends, findings are reported and corrective measures are implemented, if required.
- Detailed Environmental Control Procedures have been developed and implemented.
- An Environmental Emergency Response Plan has been established, practiced and basic training is given to employees of all departments.
- Environmental Impact Assessments are conducted for new MYTCL projects.
- A technology transfer program has been developed and environmental awareness training is on-going both on and off site.
- All employees are trained to respond quickly and effectively to any environmental impacts.
- All environmental documents are of high quality. Records are well stored, maintained and are easily accessible. Documents are reviewed and updated to ensure continuous improvement.

THE MYTCL ENVIRONMENTAL MANAGEMENT SYSTEMS - EMS

The Environmental Management System (EMS), integrated into Operational Management by the S&K Project, records and monitors compliance with stated environmental policies and objectives. This compliance has been demonstrated through MYTCL’s Société Générale de Surveillance (SGS) certifications. The current EMS requires MYTCL to continue to establish environmental planning and to continuously monitor the environmental impact of the operations.

ISO 14001:2004 guidance states that the MYTCL Environmental Management System (EMS) must be reviewed and updated to ensure continuous improvement.
ENVIRONMENTAL IMPACT MANAGEMENT PROGRAMS

Achieving both sustainability and continual improvements requires that MYTCL persistently evaluate existing environmental performances of the certified environmental management system against its environmental policies, objectives and targets for the purpose of identifying opportunities by the organisation.

Furthermore, in order to attain sound perpetual development, identify and improve environmental performance, determining the root cause and causes of non-conformance or deficiencies, and developing and implementing a plan of corrective and preventative actions are also vigorously carried out in conjunction with the operations of multifarious mining activities.

Seven key areas of environmental management are reviewed by MYTCL; namely air, water, energy, waste, land, biodiversity and compliance to incident reporting. Key Performance indicators (KPI) are used to determine where improvement and action must be taken. These KPI also evaluate the environmental conservation activities success at MYTCL. Each area has defined and globally measured attributes of environmental conservation.

The purpose in assessing MYTCL's key performance indicators is three tiered:

• to conserve the existent condition of the environment and natural resources;
• to observe the causes of environmental change; and
• to mitigate the impacts of environmental deterioration.

COMPLIANCE & CONFIRMATION BY 3RD PARTY

In order to maintain the status as a world-class mine, the S&K Project has monitored the effectiveness of its Environmental Management System by having its performance audited regularly.

The SGS auditors from Australia, Singapore and Thailand conduct an audit of the MYTCL operations for certification in the ISO 9001, OHSAS 18001, and ISO 14001 in the middle and at the end of each year. SGS Recertification Audit commenced in July of 2016, and all 3 certifications were revalidated until 2018-19. Internal audit teams formed with MYTCL personnel, and professionally certified for auditing by SGS training staff, are responsible for completing internal audits on a quarterly basis.

The purpose of the audit is to:

• ensure the existent condition of the environment and natural resources are conserved;
• observe the causes of environmental change;
• mitigate the impacts of environmental deterioration.

RECOMMENDED ACTIONS

The audit results are sent to MYTCL's General Manager for review. The General Manager then approves the follow-up recommendations and issues these to the company for implementing. These recommendations focus on areas of non-compliance or potential improvements. The recommendations range from low to high levels of urgency.

MYTCL's General Manager is responsible for the implementation of the recommendations. The General Manager issues the follow-up recommendations to the company, and the company is responsible for implementing these recommendations. The recommendations are documented in the company's Environmental Management Plan.

The purpose of the audit is to:

• ensure the existent condition of the environment and natural resources are conserved;
• observe the causes of environmental change;
• mitigate the impacts of environmental deterioration.

The recommendations are reviewed by the General Manager and then issued to the company for implementation. The company is responsible for implementing these recommendations.

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**DUST EMISSION CONTROLS**

Mining operations generate dust on roads and in crushing, conveying and stacking areas. MYTCL operates a dust-separation technology by the spraying of water to control dust rising up from the mine pits, primary and secondary crushers, crushed-ore stockpiles and haul roads. 43 dust-monitoring stations are installed in major dust-emitting areas, including some within neighbouring villages, and recorded levels are reviewed monthly. Grass cover and re-vegetation is employed on exposed soil around the mine site. Results have been variable because dust is caused by different sources, and therefore different locations and results are mostly seasonal. For comparison, results at the 43 areas indicate that dust-fall trends obviously lessen in the wet season and that the main source of dust is the ore crushing and conveying system, particularly during the dry months. The heaviest dust-fall was recorded in the area nearby the Pad 3 area. Point DM-23 recorded the highest dust-fall during July due to ROM cell management. The dust-fall at the remaining spots indicates acceptable amounts in all seasons. Elevated dust fall levels were also apparent in areas adjacent to the access roads and haul roads in the dry seasons.

Since 2014, Operations Management and the QHSE Department worked with the villages that were directly impacted by the development of the Kyisintaung Mountain. Dust emissions were recorded at 2 specific locations where excessive dust became a concern. Yegyibin Village and Ywatha Village were monitored on a daily basis, and although the dust records reached high levels for brief moments, they were well below the world standards for extended periods of time. Mining efforts are continuously mitigated to reduce dust emissions affecting these villages. Alert levels were lowered even further below world standards so as to eliminate any impact to the delicate Betel-leaf crops within wind-bearing distance. The impacts reviewed found that due to the seasonal Monsoon winds changing from a southerly direction to a northerly that heavy dust generated from blasting moved directly into these areas. Mine planning is modified to try to match with seasonal winds and drilling and blasting is closely observed in order to refrain from causing such disturbances in the future. The QHSE Department also worked closely with the CSD Team (Community & Social Development) to ensure that farmers are included in the discussions regarding dust issues and sensitive plants.

This transparency and cooperation between farmers and MYTCL continues today and will into the future in order to resolve any concerns or issues that arise from dust control.

**AIR**

Air quality is monitored on a regular basis to provide operational air quality data. All records from MYTCL relating to dust and acid mist levels are annually below harmful exposure levels.

Following international dust monitoring procedures, results are shared with regional authorities and communities.

To ensure that dust emissions had no impacts directly to the crops, the Ministry of Agriculture from the Salingyi District was consulted in 2013, in 2014-15 and interactions continued through 2016. Authorities from Yimarbin were also brought in for inspections, with all released reports indicating that the MYTCL blasting activities resulting in dust emissions had no apparent impact to their harvests.

Nonetheless, MYTCL continues consultations with the farmers and made donations for better pest control in order to assist with future agricultural growth for such crops.
Internal and external health impacts are considered when allocating the dust monitors on the S&K mine site. In 2017, there will be additional monitors installed in designated areas to comply with Occupational Health and Safety standards and the increase in the mining footprint of operations.
To ensure that crops and other vegetation beyond the mine site are not impacted due to migration of acid-mist, continual community consultation is in place. Sampling of soils and vegetation by the Ministry of Agriculture has also been conducted in the past, upon instruction from the Minister of Mines when concerns were raised within the farming communities. There have been no impacts to soil reported due to acid-mist.

Acid-Mist Detector data was collected from within the lease boundaries of the S&K Project on the southern borders and indicate that annually, from November to December, acid-mist was mostly undetectable in the area with Max PPB recorded from in the 20’s to 90’s only during extensive and breezy periods.

In order to provide a more accurate depiction of the acid-mist values experienced in the Tankhouses, a daily maximum peak value was recorded with the minimum value also recorded on the same day. Although the below graph appears to be more elevated, these maximum/minimum values remain within acceptable worker limits and also have no significant impact to their surroundings. It is a more detailed representation of a daily maximum event.
The S&K project area lies in the Chindwin River Basin. The principal watercourses near the mine area are the Chindwin River and Yama Stream. The Chindwin River, which flows approximately six kilometres to the east of the project area, is a major tributary of the Ayeyarwady, and has a catchment that covers 113,000 km². Snow melt and rainfall in the upper reaches of the basin heavily influence flows in the Chindwin River. With the onset of summer, melting snow in the upper basin highlands and Monsoon rainfall translate to stream rises and flooding at Monywa. Data from the Monywa stream Gauging Station show that stream flows are lowest over the period December to May, with the average base flow during this period at 800 m³/s. Stream flows increase markedly during the Wet Season months of June to October. During this period the maximum average monthly stream flow is more than 15,000 m³/s.

The Yama Stream, which lies to the north of the project area and flows within 200 metres of Kyisintaung, is a tributary of the Chindwin River, and has a catchment of 2,046 km². The mean annual flow ranges from 233 m³/s to 586 m³/s, with an average of 360 m³/s. Ultimately the consumption from the waterways for the S&K project has no impact on natural water resources. In fact, approximately 1,000 m³/hr. are recharged to the Yama Stream from the fresh water dewatering from the Kangon Aquifer Formation located within the Sabetaung Pit.

PUMP STATION WATER CONSUMPTION & UTILISATION FROM THE CHINDWIN RIVER- 2016

<table>
<thead>
<tr>
<th>Month</th>
<th>PS-1 Running Hours</th>
<th>KWH</th>
<th>PS-2 Running Hours</th>
<th>KWH</th>
<th>PS-3 Running Hours</th>
<th>KWH</th>
<th>Total Volume m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-16</td>
<td>632.50</td>
<td>90,176</td>
<td>372.50</td>
<td>72,756</td>
<td>2,067.90</td>
<td>172,973</td>
<td>1,018,538</td>
</tr>
<tr>
<td>Feb-16</td>
<td>692.90</td>
<td>99,590</td>
<td>532.55</td>
<td>114,920</td>
<td>2,096.20</td>
<td>175,628</td>
<td>1,396,855</td>
</tr>
<tr>
<td>Mar-16</td>
<td>849.00</td>
<td>117,020</td>
<td>608.00</td>
<td>115,828</td>
<td>2,670.00</td>
<td>183,229</td>
<td>1,339,500</td>
</tr>
<tr>
<td>Apr-16</td>
<td>873.15</td>
<td>122,424</td>
<td>599.45</td>
<td>114,502</td>
<td>2,596.20</td>
<td>175,628</td>
<td>1,396,855</td>
</tr>
<tr>
<td>May-16</td>
<td>939.90</td>
<td>124,638</td>
<td>641.40</td>
<td>120,858</td>
<td>2,663.20</td>
<td>181,012</td>
<td>1,527,306</td>
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<tr>
<td>Jun-16</td>
<td>857.60</td>
<td>123,730</td>
<td>596.00</td>
<td>116,692</td>
<td>2,644.00</td>
<td>190,279</td>
<td>1,403,296</td>
</tr>
<tr>
<td>Jul-16</td>
<td>803.80</td>
<td>117,438</td>
<td>489.70</td>
<td>108,236</td>
<td>2,644.00</td>
<td>190,279</td>
<td>1,403,296</td>
</tr>
<tr>
<td>Aug-16</td>
<td>780.00</td>
<td>112,864</td>
<td>425.00</td>
<td>85,456</td>
<td>2,717.00</td>
<td>183,357</td>
<td>1,344,405</td>
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<tr>
<td>Sep-16</td>
<td>644.45</td>
<td>98,970</td>
<td>272.35</td>
<td>58,132</td>
<td>2,587.00</td>
<td>178,279</td>
<td>1,131,208</td>
</tr>
<tr>
<td>Oct-16</td>
<td>644.00</td>
<td>93,738</td>
<td>394.00</td>
<td>127,214</td>
<td>2,593.00</td>
<td>180,385</td>
<td>1,083,500</td>
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<tr>
<td>Nov-16</td>
<td>608.00</td>
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<td>352.00</td>
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<td>373.00</td>
<td>104,188</td>
<td>2,102.25</td>
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<td>1,286,620</td>
<td>5,655.95</td>
<td>1,219,132</td>
<td>29,010.55</td>
<td>2,137,575</td>
<td>26,930,603</td>
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</table>

CONSUMPTION

The S&K project area lies in the Chindwin River Basin. The principal watercourses near the mine area are the Chindwin River and Yama Stream. The Chindwin River, which flows approximately six kilometres to the east of the project area, is a major tributary of the Ayeyarwady, and has a catchment that covers 113,000 km². Snow melt and rainfall in the upper reaches of the basin heavily influence flows in the Chindwin River. With the onset of summer, melting snow in the upper basin highlands and Monsoon rainfall translate to stream rises and flooding at Monywa. Data from the Monywa stream Gauging Station show that stream flows are lowest over the period December to May, with the average base flow during this period at 800 m³/s. Stream flows increase markedly during the Wet Season months of June to October. During this period the maximum average monthly stream flow is more than 15,000 m³/s.

The Yama Stream, which lies to the north of the project area and flows within 200 metres of Kyisintaung, is a tributary of the Chindwin River, and has a catchment of 2,046 km². The mean annual flow ranges from 233 m³/s to 586 m³/s, with an average of 360 m³/s. Ultimately the consumption from the waterways for the S&K project has no impact on natural water resources. In fact, approximately 1,000 m³/hr. are recharged to the Yama Stream from the fresh water dewatering from the Kangon Aquifer Formation located within the Sabetaung Pit.
မိန့် - သဘာဝစိမ်းများအားလုံးကို ထိန်းသိမ်းထားညီရေး မိုးတြင္းကာလအတြင္း ဂဟစနစ္တစ္ရပ္ကို ထိန္းသိမ္းထားရာ ထိန္းထားမ်ားတစ္ရပ္။

ရေကန္မ်ား - လွ့ပ္ရွားလည္ပတ္ေနသာ ဧရိယာမ်ားမွ ဖတ္စီးလာေသာ ညစ္ညမ္းေရမ်ားကို စုေဆာင္သည့္ ရေဆိုးထိန္းမ်ား။ ခ်င္းတြင္းျမစ္ႏွင့္ ယမားေခ်ာင္းကဲ့သို႕ သားက်င္မ်ားကို ညစ္ညမ္းမႈမွ ကာကြယ္ရန္ေၾကးျပား သုခံရာမွ ထြက္လာေသာ ေရမ်ားကို စုေဆာင္သည့္ ကန္မ်ားရွိေရအား စစ္ေဆးပါသည္။
In terms of consideration in sustaining the environment while accelerating mining operations, the aspiration for reducing energy consumption is essentially integrated into the environmental management system of MYTCL. Nevertheless, the progressive requirements in line with expansion of operational activities create high energy consumption. The deeper the pit, the more power is consumed by dewatering pumps, which contribute to the largest power consumed amongst all operational activities.

In 2015, through 2016 this index showed even further significant changes, indicating that continual improvement measures have been successfully employed. Operating the new Tankhouse-C at optimum efficiency and modifying improvements to the old TH-A have not only reduced costs of operations, but have trended in a positive direction the carbon footprint and greenhouse gas (GHG emission) contribution of the S&K Project.

Utilising new equipment and refurbishing old machines enhances their carbon emissions and fuel consumption, adding tremendously to the environmental considerations employed at MYTCL. Through continued reinforcement of the part we play in global responsibility we can mitigate the impact of increased fuel costs and regulations that play in global responsibility we can mitigate the impact of increased fuel costs and regulations that limit – or put a price on – carbon emissions, to apply an alternative to lessen fuel usage than through the assistance of new equipment and refurbishing old machines.

Through continued reinforcement of the part we play in global responsibility we can mitigate the impact of increased fuel costs and regulations that limit – or put a price on – carbon emissions, in an environment of increasing regulatory and public concerns about climate change, within Myanmar and globally.

Environmental considerations employed at MYTCL are being developed to accentuate potential savings.

Energy & Emission

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Hazardous Materials (HAZMAT)

MYTCL uses various kinds of products, reagents and explosives in its production processes. Some are hazardous substances and control procedures have been developed and implemented to minimise the risk of handling such materials. These substances may cause injuries or health problems if their use is not controlled. MYTCL has trained all personnel and issued HAZMAT guidelines for handling and storing of all Dangerous Goods.

ACID ROCK DRAINAGE (ARD) & ACID METALLIFEROUS DRAINAGE (AMD)

Mining operations produces, in addition to inert waste, potential acid-forming waste (PAF) containing oxidised or sulphidic minerals that are capable of producing an acid contaminant (ARD/AMD material) when exposed to air and water.

MYTCL is committed to a Zero Discharge Policy, and maintains control over acid rock drainage as per the ARD/AMD Management Plan. Waste dumps are designed and constructed with clay lining and inert material on the sill, then encapsulated or 'bunded' with clay and inert material around the dumps to prevent from ground contamination. Potential seepage water from the waste dumps will be collected and contained in interception drains dug along the toe of the waste dumps, and pumped back to containment ponds.

Contaminated water from the pit is pumped into the Overflow Pond, while run-off released from the process leach pad areas is contained in the Storm-Water Pond and any excessive water is then pumped into the Tailings Dam.

All contaminated solution is recycled back into the internal systems as make-up water for the process of irrigating the Heap Cells.
**Land Disturbance**

**Managing a Delicate Ecosystem**

As of 2016, 32 detailed sites have been recorded as disturbed and as either contaminated, impacted or affected. These locations will be remediated as part of the Mine Closure Plan with specific details as to the final land-use inclusive of the process. The old Flotation Plant and limestone waste stockpile are among several sites used by previous mining operations and listed as contaminated. MYTCL is not responsible for remediation of any pre-existing sites.

Kysintaung Pits and the heap-leach pads are disturbed sites that remain in operation. Additionally, 13 sites previously listed as disturbed have been closed and rehabilitated to date. During 2016 both the Sabetaung South and the main Sabetaung Pit have continued mine closure with detailed designs prepared and monitored by Knight Piésold and Operations Management.

**IMPACTED SITE MANAGEMENT**

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**MYTCL’s Environmental Site Management Program, monitored by the QHSE Department, references standards set by the National Environment Protection Council of Australia.**

**To control land disturbance on the S&S Project, a permit system is used to ensure personnel and departments understand that the areas to be disturbed shall have minimal environmental impacts. Environmental Impact Assessments are completed on areas of significant impact, and the Safety and Environment Department follows closely the impact criteria to ensure sustainable rehabilitation scheduling.**
Biodiversity

Wildlife Species Presence and Endangered Species

The conservation of biodiversity continued by MYTCL has a primary focus involving endangered, vulnerable and endemic species of birds and mammals. An area of conservation was determined and outlined to not be impacted within the lease area. It showed to be the dwelling of many of the fauna species indigenous to the area, and home to their feeding grounds. The mountain areas and their foothills of the north-western lease area of S&K, known as the Kyadwintaung, Hninsitaung and Taukamauk mountains, have been reserved by MYTCL specifically to allow the fauna of this area to re-establish, or maintain livelihood. Nonetheless, human intervention, farming and the mine itself have been a part in the decline of the native fauna of this area. Future plans of the mine have been a part in the decline of some population sizes of bird species are in decline, but not considerably.

EMC reports that:
"The environmental management activities of the MYTCL project including revegetation activities, protection, and the conservation activities around Kyadwintaung, Taukamauk, Hninsitaung and their foothill areas are effective."

In regards to the ecological stability of the MYTCL lease area, it is more than evident that the procedures that the principal backbone of the EMC have in place to retain, preserve and to even increase the potential sustainability of the flora and fauna is more than successful. Seasonally there are migrations of birds and long-distant travellers continuing to inundate the wetlands. Annually there are sightings of rare and Redbook classified wildlife. Continually there is rebirth in spite of the changing conditions. These results can only be testament to the forward thinking of the project’s environmental management and its focus on the importance to sustain preserved areas, as well as to re-establish cultural domains for the wildlife species that have historically made this region their home.
Compliance Incidence Reporting

Following the ISO 14001:2015 guidelines, environmental incident reporting is required to identify areas for improvement and to track progress on the treatment of an area following an incident. In 2016 there were a total of 7.0 environmental Incidents, which produced little to no impact within the lease areas. Immediate response was taken in each event through the well-trained concerned departments. Incidents were reported in a timely manner, and conservation was attained with very little damage to the flora in contact. All areas of Environmental Incident were related to the Process Department and solution spillage. Additional precautionary measures were taken to inspect all pipelines and joints as part of an improvement program to acknowledge this area of concern, and departmental training was accelerated.

All areas are carefully monitored for possible further impact after rehabilitation adhering to international standards and good practice techniques regarding environmental reclamation and mitigation.

IN ADDITION TO THE 7 KEY ELEMENTS OF ENVIRONMENTAL REPORTING

MYTCL has included 2 priority components as major subsections of the 7-Key Areas of Environmental Management & Reporting:

1. Vibration Management, and
2. Progressive Rehabilitation & Revegetation Management.

To ensure compliance to all Environmental Management Systems, a community outreach program is in place to monitor the water utilised by the surrounding villages for any impacts due to mining.
Vibration Management

In 2013 it became a prerogative of MYTCL to add to the existing 36 ECPs a 37th. This was the Vibration Control Procedure. Due to the extreme sensitivity of the surrounding village structures and religious historical buildings, vibration monitoring was conducted and an emphasis was placed on control and mitigation of areas that showed sensitivity. As the Kyisintaung Project began concentrated and intensified development, concerns were raised from local villagers in regards to the impact the vibrations were possibly accountable for. Blasting measures were practiced and resonance and peak particle velocity (PPV) monitored to ensure outside claims of damage were scrupulous, or that they may in fact be caused due to other means.

MYTCL responded with rebuild support and proper engineering of facilities to not only withstand the small vibrations caused by blasting at the new Kyisintaung Project, but to also improve structural integrity against any sizable earthquake tremors in this moderately seismic area.

Despite utilising absolute minimums in accordance with world standards from various continents it was found that some damages may be contributed to blast vibrations in poorly constructed, or pre-existing failing structures. To this impact, MYTCL responded with rebuild support and proper engineering of facilities to not only withstand the small vibrations caused by blasting at the new Kyisintaung Project, but to also improve structural integrity against any sizable earthquake tremors in this moderately seismic area.

Blasting Vibration Maximum Values at Yegyibin Village & Ywatha Village

**Permissible Limit:** 10mm/sec within 8-25Hz of Ground Vibration (India Standard) for Domestic Buildings

**PPV - Peak Particle Velocity**

- **Yegyibin Village:** 1.02, 0.99, 1.99, 1.59, 2.13, 4.80, 1.35, 2.15, 2.29, 1.30, 1.28, 3.45
- **Ywatha Village:** 3.50, 6.99, 8.20, 6.18, 4.12, 3.99, 6.97, 13.03, 7.08, 5.91, 4.98, 6.68
REHABILITATION AND REVEGETATION

MYTCL is responsible for restoring the natural landscape and for rehabilitating the area during and after mining operations. Minimization of land disturbances and progressive rehabilitation has been carried out in the following areas of the mine site:

- Land disturbed by previous mining activities
- Decommissioned areas
- Tailings-spills reclaimed areas from previous mining enterprises
- Abandoned waste dumps from previous mining
- Areas where no future mining activities are expected

This included 1.75 hectares in the north-east rehabilitation blocks of Sabetaung Waste Dump near the New Dondaw Village, 0.12 hectares in the surrounding area of Tekbin and the Kangon village schools, 2.19 hectares in tankhouse facility regions. In 2015 MYTCL commenced the rehabilitation of 394 hectares which have been rehabilitated since 1999. The goal of the 2016 plan was to plant 30,000 trees in 8.0 hectares. In fact, almost all 30,000 trees were planted in 8.05 hectares, redefining the plantations to areas where a denser thicket could be achieved and therefore reducing visual impact from the lease perimeters.

In order to facilitate Mine Closure and to ensure environmental considerations were met during development of operations, specific areas of design were initiated in 2014 and continued throughout 2016. Further expansions will continue into 2017 and onwards. These areas are highlighted in the project table. A new boundary fence-line began construction in 2014 with a perimeter berm as part of the mine closure program. This ensures that the amount of disturbed area is kept to a minimum at all times. The Rehabilitation Program has achieved excellent results. A total of 394 hectares have been rehabilitated since 1999. The goal of the 2016 plan was to plant 30,000 trees in 8.0 hectares. In fact, approximately 30,050 trees were planted in 8.05 hectares, redefining the plantations to areas where a denser thicket could be achieved and therefore reducing visual impact from the lease perimeters.

The company has developed a rolling 3-year rehabilitation plan to re-establish areas disturbed by previous mining activities and zones where no future mining activities are expected. The 3-year work plan is carried out through MYTCL’s Annual Rehabilitation Program. This ensures that the amount of disturbed area is kept to a minimum at all times. The Rehabilitation Program has achieved excellent results. A total of 394 hectares have been rehabilitated since 1999. The goal of the 2016 plan was to plant 30,000 trees in 8.0 hectares. In fact, approximately 30,050 trees were planted in 8.05 hectares, redefining the plantations to areas where a denser thicket could be achieved and therefore reducing visual impact from the lease perimeters.

### Environmental Project Jobs 2014-2016

<table>
<thead>
<tr>
<th>Environmental Project Jobs 2014-2016</th>
<th>Actual Cost US$</th>
<th>Location</th>
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<tbody>
<tr>
<td>Related to Progressive Mine Closure and Environmental Stability for Operations</td>
<td></td>
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<tr>
<td>Diversion Drain Channel Establishment</td>
<td>127,167.00</td>
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<tr>
<td>Security Access Road Shifting</td>
<td>75,240.00</td>
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<tr>
<td>Environmental Dam Access Road around South to West Boundary</td>
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<td>Pads 4 &amp; 6</td>
</tr>
<tr>
<td>Box Valley Cut Off</td>
<td>87,780.00</td>
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<tr>
<td>W-Drain Sub Embrasurement</td>
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<td>Pad 4</td>
</tr>
<tr>
<td>Top Soil Dump</td>
<td>1,630,200.00</td>
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<tr>
<td>Waste Clay Dump</td>
<td>1,364,300.00</td>
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<tr>
<td>Vegetation Clean Up &amp; Drain Clean Up</td>
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<td>New SW/EW By pass Drain Establishment</td>
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<td>New SW/EW Pipe Easement</td>
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<td>Two Catchment Pond Establishment</td>
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<td>Power Line Stability Embarkment</td>
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<td>Tekbin Knm (Skyway) Construction</td>
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<td>Wadan Knm (Skyway) Construction</td>
<td>90,166.00</td>
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<tr>
<td>Take-up Tower Bb Trap Pond Extension</td>
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<td>Pad 2</td>
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<td>Tailings Dam - Environment Project</td>
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<td>Tailings Dam</td>
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<td>1.712 km Long Chain Link Fencing with RC Post along the Mine Lease Boundary</td>
<td>22,603.00</td>
<td>Boundary Fence</td>
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<td>Construction for 9M7 Long Chain-Link Fencing with RC Post along the Mine Lease Boundary</td>
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<td>Sealed Rainwater Collection Pond near Kyisintaung Boundary and Raised the Road Surface near 420 Gate Freshwater Collection Pond to Prevent Contamination Flooding</td>
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<td>Kyisintaung Wetlands</td>
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<tr>
<td>Soil Samples for Stability Analysis (Singapore &amp; Knight Piesold)</td>
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<td>Sabetaung &amp; Pad 3</td>
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<tr>
<td>Knight Piesold Stability Analysis Design</td>
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<td>Sabetaung Domains</td>
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<td>KP Final Land-formation Designs</td>
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<td>Drain Gauge, Soil Oxygen Meter &amp; Sensors, Soil Moisture Meter &amp; Sensors</td>
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<td>Installed North &amp; South of Site by 2017</td>
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<tr>
<td>Borehole Drilling</td>
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<td>All Site Areas</td>
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<tr>
<td>Pad 4 Rainwater Channel Construction b/w Pad 4 W Drain &amp; New Storm Water Pond</td>
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<tr>
<td>Rainwater Management near Pad 4 Rainwater 4.4 km 4.4km Area</td>
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<tr>
<td>Construction of 30,000 gallons Capacity Water Storage Reservoir at ANF-0 Yard</td>
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<td>Construction for 92° Chain Link Fencing with Hard Wood Post at Tankhouse-A Near Process Office (EW Site)</td>
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<tr>
<td>Construction of 590 Long Chain-Link Fencing with Hard Wood Post at Tankhouse-A Near Pond Area</td>
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<td>60,000.00 Sabetaung &amp; Pad 3</td>
<td>Sabetaung WRD</td>
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<td>Construction for Barbed Wire Fence at PS-2 Compound</td>
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<td>PS-2</td>
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<td>Skyway Repairing and Rainwater Drainage Construction at Layanpyaung</td>
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<tr>
<td>Kyawmyat Road Repairing</td>
<td>18,037.00</td>
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<td>Eastern Site Boundary Drain Repairing: 3Kms Long for Community Compliance to Repair Drain Line</td>
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<td>Dondaw Village Skyway</td>
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<tr>
<td>Weather Station Equipment</td>
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<td>Wadan Skyway</td>
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<tr>
<td>Mine Town Road Repairing</td>
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<td>Mine Town Village</td>
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<tr>
<td>Construction for Weather Station Building</td>
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<td>Wadan Skyway</td>
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<tr>
<td>Construction of Steps to Reservoir near ANF-yard</td>
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<td>Magazines</td>
</tr>
<tr>
<td>Pond Embankment Raising near West Boundary</td>
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<td>Tekbin Wetlands</td>
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<tr>
<td>Pad 1 &amp; 3 - Internal Leakage Repairing</td>
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<td>Construction for 1,627 Long Chain-Link Fencing for New HEW W/S Area</td>
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<td>2016 Plantation of 30,500 trees</td>
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<tr>
<td>Construction of Open Shed for Kyisintaung Public View Point</td>
<td>7,144.36</td>
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<tr>
<td>Knight Piesold Trail Monitoring</td>
<td>189,000.00</td>
<td>Sabetaung North</td>
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$10,098,097.72

MRTCL သည် ကမ္ဘာကြီးအဖွဲ့အစည်းအရ မြို့ရေးမှုနှင့် မြို့ကြီးမှု တိုးတက်သော အခြေအနေများ ဖောင်ရန် ရှမ်းပေါ်ထူထောင်သော အာရှနားစနစ်များအဖြစ် ပါဝင်သည်။
In 2016, trees were also planted outside of the lease as requested by villages to assist in improving and beautifying the area for future environmental sustainability. The fencing will continue around the remainder of the lease areas during 2017 to ensure the safety of people and wildlife, or domestic animals from accidentally entering into the mining activity areas. The Sabetaung Waste Dump and pits are also now under closure using heavy machinery, while the degenerative erosion of the slopes and the shallow boundary drains around the waste dump are under preventative failure maintenance. In 2016, through 2017 a focus on the need to restrict safety risks in these areas is a priority for the QHSE Department.

The most progressive Mine Closure at MYTCL to date has been the accomplishment of the Sabetaung North Waste Dump. Commenced in 1996 and completed with NAF encapsulation in 2017 this earthen facility will be the first of its kind to reach a stage of closure in Myanmar.
IMPACT MANAGEMENT TRAINING

Protecting the environment is a priority for all members of our society. Governments have a key role in setting environmental standards and ensuring that individuals and organisations meet them. Increasingly in Myanmar, governments, industry and community organisations are working as partners to protect our environment for present and future generations. The training of our employees is the key to our success at MYTCL.

The viability of the mining industry is challenged because of high expectations for environmental protection, lower risk to human health, competing land use demands, the value of the natural environment as recreational space, and as the repository of valuable biological assets, natural environmental services and aesthetic appeal.

Mining practice at MYTCL has evolved to reflect these concerns and regulatory requirements. We have introduced management policies and practices and have adopted technologies that allow mining to occur with minimum environmental harm. Our employees are trained in our environmental stewardship continually throughout their careers with us, and the improvements to MYTCL standards can be seen intensifying year after year.

Training includes the identification of the benefits of best/good practice, include preventing harmful environmental and social impacts, improved outcomes in the project expansion stages, lower risk of non-compliance, greater acceptance/less resistance from key stakeholders (in particular local communities and land owners), lower financial burdens in the mine closure and rehabilitation phases, and lower risk of significant liabilities post-closure.

We teach our MYTCL management levels to be environmentally responsible, to always research international guidelines and look at new ways to minimise the impacts of our operations on the environment. Some of these include:

• Keeping the mining ‘footprint’ (the disturbed area) to a minimum;
• Ensuring the maximum extraction of the mineral from the smallest area;
• Minimising the risks of surface and groundwater pollution;
• Minimising the consumption of energy in the form of diesel, petrol and electricity used in mining and processing operations;
• Minimising emissions to atmosphere in the form of particulate (dust), exhaust fumes from vehicles and processing activities;
• Increasing employee training, including environmental, safety and health awareness;
• Investing in the local community infrastructure; and
• Through both concurrent and post-closure rehabilitation, returning the mining areas to positively useful and self-sustaining landforms.
The QHSE Department is diligently working with local villages and their leadership to educate the people of our communities of the safety and environmental issues affiliated with MYTCL and the S&K Project, as well as how to make an environmental reduction of their own Carbon Footprint. The objective of this well-planned exercise is to make all of our neighbours aware of the care for the environment that we altogether must take, and that we at MYTCL are following internationally recognised and scientifically proven measures to reduce, reuse, rehabilitate and respect our environment. Every month a new village has been scheduled for a consultation from the QHSE Department. During this visit our QHSE teams will discuss current or past issues, and take the time to test well-water and complete healthcare check-ups on some of the inhabitants or new-born’s from each village, as well as listening to concerns and offering assistance or advice for solutions.

In 2016 close consultations were held with villagers from all around the S&K Project. Open feelings and expressions were allowed to be voiced, and the QHSE Department with Operations Management and the Public Relations & CSD Team members addressed each and every concern or opinion with clear understanding and cooperation.

These consultations will continue through 2017, and have become a part of the new Grievance Mechanism Reporting Structure for the year’s community and inclusive development improvement planning, operated through the PR & CSD Department.

Engineers specialised in Civil and Environmental construction are consulted.

Educating the community begins with the support of Scholarships for continued education of villagers of the MYTCL Project.

Founded on ISO 26000 – Stakeholder Engagement, Operations Management and CSD will manage an Environment & Community Development Centre located at the front gates to Mine Town. This centre will be a resource for locals to review the on-going activities of MYTCL, the environmental considerations, mine closure, CSR projects, and most importantly to be a centre for communication and collaboration with the communities.
What is the CSD?
There are a variety of acronyms that are associated with business and community partnerships. Community Based Development (CBD) and its more recent variant, Community Driven Development (CDD), are among the fastest growing and more familiar mechanisms for channeling development assistance. To clarify concepts, CBD is an umbrella term that refers to projects which actively include beneficiaries in their design and management. CDD is a term, originally coined by the World Bank, which refers to CBD projects where communities have direct control over key project decisions as well as the management of investment funds.

CSD, or Community & Social Development, is the term that MYTCL has initiated to clearly identify the goals of the developing philanthropic programs with the implementation of the CSD Team in March of 2013. CSD combines the elements of CDD and the CBD project incentives, together with the CBO concept, Community Based Organisations, and wraps them all up into a simple action term – Community & Social Development.

CSD is regarded as a mechanism which can among other things: (i) Enhance sustainability; (ii) Improve efficiency and effectiveness; (iii) Allow poverty reduction efforts to be taken to scale; (iv) Make development more inclusive; (v) Empower poor people, build social capital, and strengthen governance; and (vi) Complete market and public sector activities.

The CSD Team is the most critical part of this mechanism. Designed to engage stakeholders directly, the CSD Team members are villagers. One representative from each of the prominent villages is elected through a government assisted process. These CSD Team members are provided with a monthly fee for the compensation of their time and efforts put into the development of the CSD/CSR philanthropic programs, including the Mobile Medical Team services provided by MYTCL. Formal and informal processes are used by the CSD to develop and maintain relationships, to keep stakeholders informed of business outcomes and future plans, and to explore stakeholder issues and concerns.

Any serious stakeholder concerns or key opportunities are brought to the attention of Operations Management and the Managing Director through our CSD Team.

Engaging Government and Communities in Relation to their Expectations of MYTCL
Through the alliance of strong relationships built with the CSD Team, MYTCL seeks active, inclusive engagement with government authorities and our communities. We understand that different stakeholders have differing views about, and expectations from, our activities. This can cover a wide range of matters, including economic, environmental and social responsibility matters. Utilising our CSD Team members we engage in constructive debate, give and seek feedback, respect cultural points of view and understand that our business is not familiar to the people of Myanmar. Many of our stakeholders may also be unaware of the full range of community investment or capacity building we undertake or fund directly or indirectly. Joining CSD we continue to work with stakeholders on increasing awareness and educating people on the nature of our business. This enables them to understand our perspective and our actions.

MYTCLအေပၚတြင္ထားရွိေသာေမွ်ာ္လင့္ခ်က္မ်ားႏွင့္ပတ္သက္၍အစိုးရ၊လူမႈအဖြဲ႕အစည္းမ်ားႏွင့္ ေတြ႕ဆံုေဆြးေႏြးေဆာင္ရြက္မႈ CSD အသင္းအဖြဲ႕ႏွင့္ တည္ေဆာက္ထားေသာ ခိုင္မာေသာ ကူးလူးဆက္ဆံေရး မဟာမိတ္အေနအထားျဖင့္ MYTCL သည္တက္ၾကြေသာ၊ အစိုးရအာဏာပိုင္ အဖြဲ႕အစည္းမ်ားႏွင့္ လူမႈေရးအဖြဲ႕အစည္းမ်ားအပါအဝင္ ေတြ႕ဆံုေဆြးေႏြးပြဲမ်ားကို ရွာေဖြပါသည္။ ကြ်န္ေတာ္မ်ားလွဳပ္ ရွားေဆာင္ရြက္မႈမ်ားႏွင့္ ျမင္ကြင္းတစ္ဆံုးကို ၎တို႕မွ နားလည္သေဘာေပါက္သြားႏိုင္ပါသည္။
What is CSR?

There are literally hundreds of definitions for CSR and many organisations have differences in their perspectives or approaches due to cultural, moral or political motivations. The one that we think says it best comes from the ISO Guidance Standard on Social Responsibility, ISO 26000, published in 2010. It says:

“Social responsibility is the responsibility of an organisation for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that:

- Contributes to sustainable development, including the health and the welfare of society,
- Takes into account the expectations of stakeholders,
- Is in compliance with applicable law and consistent with international norms of behaviour, and
- Is integrated throughout the organisation and practised in its relationships.”

Is CSR only about donating to the Communities?

Donations and projects that fall under the MYTCL definitions of Community & Social Development – CSD are a part of CSR, but these are not the primary goals of what CSR is all about. In truth, this may be the focal point where many stakeholders have high expectations, but it is not the first item on the list of corporate responsibilities. It is the last objective of CSR.

There are 4 main elements of CSR and they have a specific order of priority:

- Economic Responsibilities - A business exists to make a profit for shareholders. If it fails to do so, it likely won’t be able to pay its employees, taxes and other obligations. A corporate social responsibility program (CSR/CSD program) cannot be implemented until a business is profitable.
- Legal Responsibilities - Following the law is the foundation of corporate responsibility. A company cannot benefit society if it does not adhere to labour and tax laws or applicable industry regulations.
- Ethical Responsibilities - Once a company is profitable and meets its legal responsibilities, it can move up the ladder to ethical responsibilities, which might include paying higher wages, offering employees better benefits, avoiding trade with unscrupulous companies or providing jobs to those who would otherwise have difficulty finding work.
- Philanthropic Responsibilities - As a company meets its economic, legal and ethical responsibilities, it can consider taking on philanthropic responsibilities. Corporate philanthropy ranges in size and scope, and can include everything from donating time to a local charity to building a children’s hospital.

Does MYTCL meet the first 3 requirements of CSR so that it can consider Philanthropic Responsibilities?

Yes, we do.

At MYTCL our Economic and Legal Responsibilities are constantly analysed internally, as well as by a variety of government and NGO organisations to ensure 100% compliance. Our Ethical Responsibilities are an area where we seek continual improvement as the country of Myanmar, the government and the economic development changes shape over time. We confidently regard our ethical obligations as achieving some of the highest levels within the Republic of the Union of Myanmar.
ထိခိုက္ခံရမႈမ်ားအတြက္ အဖြဲ႕အစည္းတစ္ရပ္၏တာဝန္ရွိးခင္းျဖစ္ပါသည္။

မိသားစုမ်ားအတြက္ အစီအစဥ္တစ္ရပ္လည္းရွိပါသည္။
ပါဝင္ပတ္သက္သူ အေတာ္ မ်ားမ်ားတြင္ရွိသည့္ ေမွ်ာ္မွန္းခ်က္ အေလးထားရဆံုေသာ အခ်က္တစ္ခ်က္ ႏွင့္စပ္လ်ဥ္းေသာ အရာအားလံုး၏ အဓိကပန္းတိုင္မ်ား မဟုတ္ၾကပါ။ အမွန္အကန္ဆိုရပါလွ်င္ ဤအရာသည္ လူမႈေရးဆိုင္ရာတာဝန္ရွိမႈ (Social Responsibility) သည္ ေအာက္ပါပြင့္လင္းျမင္သာေသာ၊ လူက်င့္ဝတ္ႏွင့္ ကိုက္ညီ ျပည္ဆိုင္ရာအဖြဲ႕အစည္းမွ အေကာင္းဆံုးေပၚေပါက္လာသည့္ ဆိုမိန္႕ခ်က္မ်ားကို ေအာက္ပါအတိုင္းေျပာဆိုထားပါသည္။

ေဆာင္မႈတို႕တြင္ အမ်ိဳးမ်ိဳး ကြဲျပားျခားနားမႈရွိၾကပါသည္။ ကြ်န္ေတာ္တို႕ေတြး ထင္ထားေသာ အခ်က္တစ္ခ်က္က ၂၀၁၀ CSR အဓိပၸါယ္ဖြင့္ဆိုခ်က္ကို ရာႏွင့္ခ်ီ၍ စာေပက်မ္းဂန္မ်ားတြင္ ေတြ႕ရွိရပါသည္။ အသင္းအဖြဲ႕တို႕သည္ ယဥ္ေက်းမႈပိုင္း၊ ရန္ MYTCL သည္ CRS ၏ ပထမလိုအပ္ခ်က္ (၃)မ်ိဳး ေသာ ပရဟိတလုပ္ငန္းသည္ နယ္ပယ္အေနအေထား အမ်ိဳးမ်ိဳးရွိပါသည္။}

CSR မောင့်ရန်းမ်ားအတြက္ လူမႈေရးဆိုင္ရာတာဝန္ရွိမႈ - ကုမၸဏီတစ္ခုသည္ အက်ိဳးအျမတ္ျဖစ္လာၿပီး ဥပေဒပိုင္းဆိုင္ရာ တာဝန္ရွိမႈ ျပည့္မီ ဥပေဒေလးစားလိုက္နာျခင္းသည္ ေပါင္းစည္းထားေသာ တာဝန္ရွိမႈ၏ အေျခခံအုတ္တာဝန္ရွိမႈအစီအစဥ္ (CSR/CSD program) ကို အေကာင္အထည္ေဖာ္ႏိုင္မည္ မဟုတ္ပါ။

ပါဝင္ပတ္သက္သူမ်ား၏ ေမွ်ာ္မွန္းထားခ်က္မ်ားကို ထည့္သြင္း စဥ္းစားထားရန္။
DEFINING MYTCL BEST PRACTICE: THE UNITED NATIONS (UNDP) & ISO-26000

Mirroring the United Nations Inclusive Development Programme (UNDP), MYTCL initiated an Integrated Development-Action Plan (IDAP) to address the issues of sustainability and community development. The foundation of this action plan rests on the UNDP platform:

"Development can be inclusive - and reduce poverty - only if all groups of people contribute to creating opportunities, share the benefits of development and participate in decision-making."

When it comes to CSR and the activities that MYTCL has completed over the course of the 2016-17 fiscal year, highlighted is the key element of continued cooperation that has made the year a success. Government officials, MEHL partners, communities, company employees and management have unified in transparent and open communications of the processes and goals of the projects initiated. There are wide variety of definitions and strategies aligned with CSR within the international arena, but the underlying message is the same in every case.

The European Commission makes this message clear as it defines CSR simply as:

"The responsibility of enterprises for their impacts on society."

At Myanmar Yang Tse Copper Limited we undertake voluntary actions directly related to both the CSR and Community Development strategies, and have integrated a process to address social, environmental and ethical human rights within our business operations, closely consulting and collaborating with our stakeholders. Efforts focus on the approach to either improve the living conditions (economic, social, and environmental) of local communities, or to reduce the negative impacts of our mining projects. By definition, MYTCL's voluntary actions are those that go beyond legal obligations, contracts, and licence agreements. Combining these 2 functions into the core strategy of MYTCL’s CSR and CSD (Community and Social Development) Programs creates an environment recognised as following Best Practice in community relations, and although the concept is new to the region, and at times not clearly understood by all members of the community or government, the collaborations that occur are fundamental in maintaining the Best Practice scenario.

In 2017-18, the ongoing improvements are to ensure Best Practice principles include the implementation of ISO 26000 as a guide and framework to integrate and to enhance social responsibility into our values and practices. This ISO focuses on sustainable development, growth and change that maintains and improves the natural environment, human resources, and society upon which we depend. ISO 26000 provides information and decision-making tools for MYTCL to identify ways that we can improve our impacts on the people and place that we work and live in. It is about the sustainability of the business through integrity and smart business decisions that...

"recognise and integrate the impact on and influence of all stakeholders..."

It is through the continuing evolution of these activities that the PR & CSD Department of MYTCL serves its function. The key purpose of this department is to act as a unified committee of diverse members, designed to implement the plan and to act as the catalyst between all parties.
ဗုဒ္ဓဓာတ်အာန်တော်များတွင် အကြောင်းရှင်းလင်းချင်သော လူမျိုးအဖြဲ႕အစည္း (CSR) နှင့်အနီးစပ္ဆံုးဆက္ႏြယ္သည့္ ဒုတိယအခ်က္ ရွိပါသည္။

ဗုဒ္ဓဓာတ်အာန်တော်များအားလုံးများကို အဓိပၸာယ္ဖြင့္ဆိုျခင္း တနာအေလ်ာက္ လုပ္ေဆာင္ေပးမႈမ်ားသည္ ဥပေဒျပ႒ာန္းခ်က္အေပၚ လုိက္နာရျခင္း၊ စာခ်ဳပ္စာတမ္းအရ ေဆာင္ရြက္ေပးရန္တို႕အေပၚ ကၽြန္ေတာ္မ်ားသည္ အေလးထား ႀကိဳးပမ္းလုပ္ေဆာင္ပါသည္။

မိသားစုိုင္းများ၊ အရွယ်အစားများ၊ လူမျိုးကူညီေရးအဖြဲ႕ (CSR) များနှင့် လူမျိုးအဖြဲ႕အစည္းများကို အေျခခံအေဆာက္အအံု ဆက္ႏြယ္ေသာ ဆံုးရံႈးမႈတို႕ႏွင့္ အဓိပၸာယ္ ဖြင့္ဆိုထားပါသည္။

မိသားစုိုင္းများနှင့်အနီးစပ္ဆံုးဆက္ႏြယ္ခဲ့သည့္ လုပ္ငန္းများ၏ ေရရွည္တည္တံ့ေသာ လူမႈေရးႏွင့္ စီးပြားေရးဆိုင္ရာ ဖြံ႕ၿဖိဳးတိုးတက္မႈအတြက္ MYTCL စီမံခ်က္သည္ အမ်ိဳးသားေရွ႕အလုပ္အကိုင္ခန္႕ထားမႈႏွင့္ အေျခခံအေဆာက္အအံု ဆက္ႏြယ္ေသာ ဆံုးရံႈးမႈတို႕ ဦးခေါ်အေမာင္အေမာင္အထီးအေနရပ္၀ိုက္မႈမ်ားတြင္ အတူတကြပူးေပါင္းလုပ္ခဲ့သည္။

လူမႈအဖြဲ႕အစည္း ဖြံ႕ၿဖိဳးတိုးတက္ေစျခင္း ဆိုသည္မွာ လူမႈအဖြဲ႕အစည္းမ်ား၏ စြမ္းပကား ႏွင့္ အက်ိဳးထိေရာက္မႈအား လူမႈဘဝအဖြဲ႕အစည္းမ်ားအေပၚ ထိခိုက္မႈအတြက္ လုပ္ငန္းပိုင္းဆိုင္ရာ တာဝန္ရွိမႈ
The CSD program and process is based on 10 Community Rebuilding Principles.

1. Start where the people are.
2. Build relationships; then introduce new ideas, showing how they meet identified needs.
4. Involve as many community people as possible in all activities from the start.
5. Train people close to their home communities.
6. Train in locally acceptable ways (e.g. methods, facilities).
7. Train trainers who can train others.
8. Involve local leadership.
9. Cooperate with governments.
10. Encourage interdependent relationships vs. dependent or totally independent relationships.

Over the course of the 2016-17 fiscal years, the PR Department worked closely with all the parties involved with community affairs and planning, and the intimate relationship established between MYTCL and the communities within the region has matured with every year. The CSR/CSD Projects and budget for 2016-17 grossed a total of $500,000, including a Mobile Medical Care programme. As the annual execution of the planning becomes a reality and scheduled dates turn requests into action, the villages have recognised and shown appreciation for the value that MYTCL brings to the region. Libraries, schools, educational assistance and retirement funding, roadways and other much needed infrastructure and necessities such as electricity and water supply have emerged through the public consultations conducted between the PR Department & CSD Team, the communities and the government.

2017-18 will be a time for the PR Department and its CSD Team to focus on corporate commitment and true purpose, on maintaining cultural cohesion between the company and the Myanmar people, and as the unified group of diverse individuals representing their independent community. Focus will be applied to the continued training and internal development of this team, adding to its effectiveness in responding to the communities, and representing the company as ‘Ambassadors of Harmony’ working towards the mutual benefit for company, and country.
About the Village of Wadan

Daw Nan Aye Thidar Sin is 30 years of age and the elected CSD Team Representative for the Wadan Village.

“It is my duty to work with MYTCL to accomplish the greatest of needs for our village....”

These are very successful times for Wadan, which is located adjacent to the S&K Mine Project. Villagers are high on the list of priority to receive job opportunities, promotions from within the organisation, as well as CSD and CSR Projects to help improve the community’s quality of life.

With approximately 1,279 persons living in the village Daw Nan Aye Thidar Sin comments on the prospects for her fellow villagers;

“I think that we are very fortunate to be located along the main roadways between the S&K Project and the Wadan Leptaduang Mine. This allows for many business chances for our people. Employees need living essentials to be found close to their work-site. We even have shops that offer Chinese goods and food for the Labours that come from overseas to work on special projects in the mine companies.”

There are 144 persons employed at Myanmar Yang Tse, which is 11.49% of Wadan’s total population. During extension construction of the Heap Leach Pads in 2012-14, this village was provided primary opportunity for Casual Labourer employment. Upon request of the government, once the construction was completed the Casual Labourers were not released and were retained to work throughout the site on further temporary jobs. A total of 309.61 acres of land have been utilised by the S&K Project within the S&K Project.

There are many fertile lands in the village tract; however Daw Nan Aye Thidar Sin reports that their earnings are less and less every year.

The World Bank has indicated that the economic growth in Myanmar remains strong, however inflation is critically impacting the costs of goods and services in many regions.

“People are constantly looking towards MYTCL for better paying jobs and salaries to support their families in these changing times. Monywa area is growing and everything is becoming more expensive in Myanmar. As a CSD Team member I will constantly look for new jobs or other opportunities for my village people. I also need to collect the advice from my village for the CSR donations, and help MYTCL decide which is the most important for everyone. My position is often a happy experience, but I sometimes have great pressures from the villagers. Everyone wants something different. It is my duty to work with MYTCL to accomplish the greatest of needs for our village, and to make the communications smooth and successful every day.”

Wadan Village

Wadan Village is found opposite Mine Town that was built in 1994 for the S&K Project.

Corporate Social Responsibility

Wadan Village is neighbouring to the Mine Town that was built by the Ministry of Mines in the early 1990’s. This village has always been side-by-side the mine and its activities, supporting MYTCL in its endeavours. Over the years it has become almost a part of the mining community itself. CSR for this village includes future planning for employment beyond the closure of the mining activities. The Community & Social Development Team is currently in discussions with many of the villages, including Wadan, regarding SME Projects and long-term sustainable programs. As there is a great percentage of this village community engaged in activities both directly and indirectly associated with the mine, there will remain a need for sustainable changes regarding employment once the mine has completed its activities.

In 2014, and into the beginnings of 2015, a significant portion of the progressive Mine Closure Program was completed along the southern boundaries of the S&K Project, just across the main road from Wadan. A 10-metre high bund and a 4-metre deep drain were established for management of fresh water coming into the site from Monkey Mountain to the south-west. During the Monsoon seasons this water is captured in this drain and directed off-site so as to remain fresh and come into no contact with mining activities. The bund (or mound of earth) constructed along the 3-kms boundary was planted with fast growing Blue-gum Eucalypts, native species of Acacia, and seasonal grasses to provide a visual barrier between the village and roadways, and of the mining within. As one travels by the site it is easy to pass it altogether unnoticed because of this aggressive closure methodology. The fence-line was pulled into the lease boundary by 4-metres in order to provide space for environmental action outside of the fence, and still remain within the lease area. Trees were also planted within this external area to enhance the natural surroundings of the site. In time the trees will grow to 10-metres and the ecosystem will re-establish within this area of greenery, creating a completely rehabilitated wall around the site.

Community & Social Development

In 2015-16 the budget for the Wadan Village was increased from previous years to $27,798.78 USD. This significant increase includes construction of a Library, construction modifications and finishing touches to the Primary School, as well as a large project of extending the village fresh-water dam.

For the 2016-17 year the village and its administration have requested a $68,563.00 USD project that will extend their water reservoir capacity with a new tower, pumps and water pipelines.
Mine Town Village

Created by the Ministry of Mines, Mine Town is the centre of commerce for the mining community.

About Mine Town

With approximately 2,953 persons living in this self-sustaining town that has the majority of its daily visitors coming into town to do business from areas outside of the MYTCL copper mine, there is no need for a CSD Representative. There are 407 permanent employees from the previous mining enterprises, 369 contract employees and another 19 casual labourers comprising a total 795 persons employed at MYTCL, constituting 26.5% of the town’s total population working within the mining organisation.

- There is 1 High School; the town is managed by MEHL – Myanmar Economics Holdings Limited and is not a part of the operations of MYTCL. It fully supports electricity, water resources and water purifiers are provided by MYTCL. There is also a library, Copper Mine Basic Labour Organisation Office, an Environment & Community Activities Centre and an Institute Society that have been donated through the budgets of MYTCL for Community and Social Development Projects.

- The town also supports a small fire department managed by MEHL.

- MYTCL has developed and manages a Mine Town Hospital that is used for all employees and family members for emergency care, as well as performing annual check-ups, x-rays, dental care, childbirth and some small surgeries for general healthcare of the mining community.

- Mine Town manages 1 Monastery named Mine Myoe Oo.

- The Head Monk of this village is U Thargaya.

- The elected Village Administrator is U Tin Aung.

Corporate Social Responsibility

Mine Town has, for the most of its history, been supported in full by the owners of the mine. From electricity extension, water maintenance, road repairs, building maintenance and social programs, the Monywa No 1 Copper Mine, now known as MYTCL has been the foundation of care for this town’s infrastructure and internal growth. Since 2013, Management has begun the careful consideration for the life of the townspeople, the sustainability of the town and the economic impacts that will occur once the mine has experienced closure. Going forward and into the future, the development of SME Projects and Sustainability Programs will be the main focus of CSR for the Mine Town of Myanmar Yang Tse Copper Limited.

Community & Social Development

In 2015-16 the budget for Mine Town increased from the previous year to more than $25,000 USD including an ambulance and furniture for a variety of social areas. In the 2016-17 budgets totalled $11,215 USD and a focus was placed on sports equipment for the Kindergarten and completion of the Mine Town School Hall. Water pipelines were also extended to the Head Monastery. In 2015-16 the budget for Mine Town increased to more than $25,000 USD including an ambulance and furniture for a variety of social areas. As the Mine Town is owned and operated by MEHL, the CSD projects that are required are mostly arranged through this organisation and MYTCL supports their requests as required. From time to time the townspeople request directly to MYTCL and donations are made outside of the CSR & CSD Project structure.

Myayake & Myasane Villages

The distant villages of Myayake and Myasane are found to the northwest of the S&K Project.

About the Villages of Myayake and Myasane

Considered to be non-impacted villages due to the distance of their locations to the mine, as well as the few land-owners of 21.65 acres that had been displaced during the initial operations in 1996, these villages host no direct CSD members. There are approximately 1,266 persons living in the village of Myayake, and 195 inhabitants within Myasane. Only 45 persons are employed at MYTCL from Myayake, or 3.55% of the total populace and another 12 from Myasane, composing 6.25% of their population.

- There is 1 Primary School in Myayake and no school within Myasane; both of these villages support electricity that was provided by MYTCL in the 2014-15 budgets and there are tube wells for water in both villages.

- The villages share 1 Monastery named Myayake Taungpaw.

- The Head Monk of this village is U Karunya.

- The elected Village Administrator of Myasane is U Ngwe, and of Myayake is U Kan Kyi.

- There are no CSD members for these villages and are in turn managed by the Tract Village Administrator of Yeegybin regarding CSR and CSD participation.

Corporate Social Responsibility

Although these 2 villages are quite far from the project, they are considered by MYTCL for CSD and CSR programs due to previous land acquisitions from within the mine lease domain. When the mine began to expand there was a radius determined, which encompassed these villages to be included into the MYTCL projects. Electricity was the primary need for these villages and MYTCL completed their request in late 2015. Mobile Medical units are also sent out to these village areas to include the Myayake and Myasane people into the Mobile Medical Treatment Programs, which budgets $50,000 USD annually for the programs.

Additional agendas that these villages are included in are the donations to the elderly, as well as the scholarship programs for all students within the villages.

Community & Social Development

For 2016-17 fiscal years, the annual budget that was allocated to the CSD & CSR Program for the Myayake Village was $8,250.00 USD for the purchase of an Ambulance vehicle. For Myasane the Village Administrator requested that a fence be constructed for the Primary School and electricity extensions added totalling $5,338.24 USD.
Kyaukmyet Village

About the Kyaukmyet Village

Situated just below the confluence of the Yama Stream and the Chindwin River, this village is spread along the shores of the river’s banks to take full advantage of the opportunities of a waterway community. Logging, dredging for valued sand or river-stone and precious metals such as gold and platinum are common livelihoods of the community. Concrete and transport companies also use this village as a gateway for delivering supplies to the inner colonies of the region, bringing some commerce and trade. MYTCL also takes the opportunity of managing its own supplies shipped from Yangon by barge through the village. 19.76 acres have been incorporated into MYTCL facilities. Built within the village, MYTCL has established a large jetty of concrete and steel, made to endure the vicious flooding of the Chindwin. Rising more than 10 metres above the average water level, the Monsoon rains raise the river’s crest to touch the base of the jetty platform. This is the time of year that barges and large equipment can be directly transported to the village that is located a mere 4 kms from the site.

Most notably of this village is the array of pagodas and old ruins from ages long past. There are 4 monasteries that are not directly related to each other: three resting on the banks of the Chindwin, while the other is perched on the mountain top that watches over the gathering waterways north of the village.

• The names of these Monasteries are: Yayawunn, Taungyin, Magyitawya and Taunggyar.
• The Head Monks are respectively: U Thumana, U Sakaneda, U Zawtika and U Otetama.
• The elected Village Administrator is U Lin Aung.
• There is 1 Primary School, a tube well as well as river water resources.

CSR and CSD involvement does play an important role however, and in the coming years there will be more emphasis placed on the community development and CSR programs of MYTCL and MWMCL, as the impacts on this community may grow during the mine’s develop, and the access routes of this small village becomes more travelled to and from the river site.

The hustle and bustle of the Kyaukmyet Village is inspired by the Chindwin River and the activities associated with its many industries. Kyaukmyet Village becomes more travelled to and from the river site impacts on this community may grow during the mine’s develop, and the access routes of this small village.

Shwepankhine & Thaedawgyi Villages

About the Villages of Shwepankhine and Thaedawgyi

Shwepankhine is a smaller village that is considered an indirect impact village due to the location and the distance from the mining activities. Protected by the western mountain range of Hnisaitung, Kyadwintaung and Taungkamauk Mountains (Rose, Tiger and Rice Hat Mountains), Shwepankhine is a village indulging in the peaceful life of tranquil farming and animal husbandry. With 583 inhabitants of the village there are 7.89%, or 46 of them employed at MYTCL.

U Zay Htay is our Village Administrator, and his hope for the future with MYTCL is that they hire more of the people from Shwepankhine. This will help the villagers, and I also believe that it will give them the opportunity to get closer to the project and understand better what it is that MYTCL is doing in areas such as the environment.

Thaedawgyi is even smaller of a village and quite often these 2 villages are combined in the CSR and CSD Projects from MYTCL. There are approximately 304 villagers and 11 of them are employed by the Company, comprising a 3.62% of the entire population.

Daw Moh Moh Lwin is an enthusiastic 28 years old and has been on the CSD Team for 3 years.

I look at what we need most in my community. I share with my Administrator, U San Naing, the procedures that MYTCL follows to provide fair charity and CSR works for the villages. For us, electricity and SME possibilities are the most urgent tasks I am pursuing with the Company in the 2017 onwards budgets.

Corporate Social Responsibility

Due to the location of these villages, they are fortunate to be adjacent to an area that has been considered for ecological preservation and restoration development as part of the long-term CSR goals of MYTCL. The area of the 3 mountains is called the Twin Peaks Wildlife and Conservation Zone, and has been kept aside from being impacted by mining activities.

CSR activities include $40,796.36 for the completion of the Shwepankhine Bridge and $4,686 USD of repairs to the Shwepankhine Dam. $18,966 was dedicated to Thaedawgyi for the construction of an E-Library building fully stocked with computers and accessories.
Kangon Village

The largest of the villages near the S&K mine area faces great challenges as it develops in both its size and in its opinions.

About the Village of Kangon

“Surely some villagers like me and some even hate me, but I believe that I am doing the right thing and in an honest way...”

U Myint Than Swe is 50 years of age and the first re-elected CSD Team Representative for the brazen Kangon Village. These are very complex times for Kangon, which is located adjacent to the S&K Mine Project and established directly on the alluvial plains of the ancient waterways of the Chindwin and Yoma. Villagers are high on the list of priority to receive job opportunities, promotions from within the organisation, as well as CSD and CSR projects to help improve the community’s quality of life. But the complexities run deep for some of the villagers, and land compensation and historical injustices are pushed onto MYTCL to repair, recompense and manage. Unfortunately, along with their cries of despair from days gone by comes activist intervention and illegal disturbances to the mining operations. Not an easy job for our CSD members to act as mediators between.

There are approximately 4,014 persons living in this village that is self-supporting and has the majority of its inhabitants working in areas outside of the MYTCL copper mine. 170 persons are employed at MYTCL, composing 4.23% of the village’s total population. U Myint Than Swe comments on the attitudes and perceptions of his fellow villagers.

“The employment rate from our village is very low compared to the population, and often people complain about this fact. But then they go and protest at the gates, or threaten to stop the mine because the past owners and government have not fully compensated them. They want jobs from the mine and they want the mine to stop. Things are very complicated.”

Corporate Social Responsibility

The Kangon Village, together with the Dondaw Village, was offered the largest donation works regarding Community & Social Development Projects forecast for 2015-16 reflected even further the division of unity within the village of Kangon. An enormous water project was budgeted with nearly $65,000 USD dedicated to improvements to water facilities and annual works. Despite the negotiations with village leaders, the water project was cancelled because the villagers did not agree with the water source and demanded water directly from the Chindwin River. This demand was an impossibility for an annual budget by MYTCL due to the millions of dollars it would have required for such a project. Nevertheless the project has been taken into consideration for a more long-term development programme to be led by the Myanmar government.

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The CSR Department and the CSD representative for Kangon keep open channels for negotiations and for transparency to encourage development.

The complexities of the Kangon Village continue to be the greatest challenge for the MYTCL development, as well as for the environmental safety of the region. The Tailings areas that had been refused by the majority of land-owners to be allowed to be cleaned through a CSR project in 2013-14 remains the eyesore of the country. Great effort is placed on creating harmony with the village, but the splintered factions that exist in its leadership core make growth slow and laborious. The village on the whole supports MYTCL, however a few find it their goal to constantly fight against the CSR programs, or to insist on cash and not adhere to the public tender systems for clearly open and fair contracts. Nevertheless the CSR Department and the CSD representative for Kangon keep open channels for negotiations and for transparency to encourage development.
Overlooking the S&K Project from the opposite side of the Yama Stream, Yegyibin Village develops and prospers with agricultural expansion.

U Kyaw Moe is 43 years of age and been a member of the CSD Team for the past 3 years. “You cannot imagine what it means to have electricity. Not only do we have this long wished-for convenience, but we can now do our part in saving the environment by not cutting down trees to cook with anymore…”

He has watched his village continue to grow in size with the expansion of the village electricity projects by MYTCL, and even relocate some of its inhabitants to a new location due to the erosion of the river banks. There are approximately 779 persons living in both the New Yegyibin and Old Yegyibin villages. 77 persons are employed at Yang Tse, composing 9.88% of the village’s total population working within the mining organisation.

“We all say that we are happy to do our part for our community and that it is our responsibility. But I truly take pride in watching my achievements with the Company turn into something wonderful. Each project comes to life by the end of each year, and each year our community changes its way of life for the better in ways outsiders from more modern countries cannot even imagine. Do you know how harmful it is to be cooking with wood every day? We have been slowly poisoning ourselves over the years while we try to feed our children. Something as simple and as useful as electricity changes all of that. It improves our lives. It improves our environment!”

Yegyibin is primarily a farming community, although with 10% of the population engaged in directly working for the mine, it can be assumed that this is a significant figure in regards to gross family income. The average salary at MYTCL is above 250 USD/month, and as 53 of the 78 employed are Contract Employees this also identifies that the village is dependent on MYTCL for financial stability. Fields can now be seen ploughed by machines in place of oxen and carts, and the early signs of industrialisation are taking place within the region surrounding the MYTCL Project.

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Community & Social Development

For 2015-16 fiscal year, the annual budget that was allocated to the CSD & CSR Program (Community & Social Development) for the Yegyibin Village totalled $19,419.60 USD. Coordinating with the CSD Member from the village, as well as with the Ministry of Mines, the Regional Ministry and the Chief Minister of Sagaing Region, the projects for Yegyibin were agreed upon and unanimously approved by MYTCL and MEHL, who would split the cost of the CSD & CSR annual budget of $500,000 USD.

In 2016-17 the budget for the Yegyibin Villages, new and old, increased to $36,500 USD to include a new bridge construction and a Primary School construction to include toilet facilities.

In order to go beyond the Community & Social Development of the projects, CSR took precedence and the works required were tendered out to the community, providing prospects for direct communities to complete their own projects to enhance sustainable development through local companies, and even newly established companies that emerged due to the opportunities created by MYTCL and the CSD & CSR projects.
Ywatha & Ngarthezsu Villages

Merged on the northern boundaries of the S&K Project these villages expand with the cultivation of Betel Leaf, sedimentation mining and even a noodle factory.

About the Villages of Ywatha & Ngarthezsu

“I have been with MYTCL since the beginning of the CSD Team programme and I have seen how we have built strong relationships with our communities...”

Daw Htwe Htwe Mar is 38 years old and has managed the only crop benefit project in history for MYTCL.

“The Crop Benefit Programme was a great success, although it took some time to accomplish due to so many differences of opinions. But one day it all just happened and MYTCL management did a great job at completing the project as quickly as possible to make everyone happy and close the grievance. It is my hope that MYTCL will be able to expand the CSR Projects to include SMEs into the future. I think this will be a greater benefit for my village as many are dependent on the sensitive and unpredictable market of the Betel Plant.”

There are approximately 852 persons living in these 2 villages that have merged together in their development, yet remained distinct in their governance. 77 persons are employed at Yang Tse, composing 9.04% of the village’s total population working within the mining organisation. There are in fact so many men from this village working at the mine, that there are no longer any eligible unemployed men from within the village to gain employment with MYTCL.

Corporate Social Responsibility

The S&K Project is composed of 2 Primary Ore deposits, Sabeataung and Kyisintaung. When the rapid stripping of the top of the Kyisintaung Mountain commenced in 2012 there were complaints from the Betel Leaf Farmers of the areas regarding impact of dust to their sensitive Betel Leaf plantations. Although the dust was carefully monitored and measured by the MYTCL QHSE Department, and the dust settlement was found to be well below the World Bank Standard for ambient air controls, the leaves were claimed to be impacted by the farmers. The Ministry of Agriculture was invited by the CSD Team of MYTCL to come and investigate as a 3rd party to assist in the mitigation of the complaints and to offer guidance to the MYTCL and Stakeholders. The Ministry discovered that there was no direct or indirect impact and that MYTCL should consider providing the farmers with some sort of assistance to assist in their cultivation and their crop performance due to disease and ground conditions.

A Crop Assistance was granted by the General Manager of MYTCL and managed through the Operations Manager and the CSD Team. 52 kyat per plant were donated to the villages all surrounding the site with Betel Plantations.

The area itself engulfed most of the Ywatha and Ngarthezsu refused this charitable donation and continued their efforts to consult with MYTCL regarding possible impacts to their plantations directly situated next to the mine. All other village crops are not within close proximity of the Kyisintaung development.

In 2015 discussions continued. A direct focus on the dust migration from the mine during blasting, as well as the settlement of the dust produced by the mine was examined with the villagers and its representatives during the March and April months. It is at this time that the wind blows directly to the north, drifting to the north-east as the winds swirl around the mountains, and finally through these farm locations.

Ambient air results of PM 10 were recorded and shared with the villagers and the farmers. Results were consistently below the WB Standards, however did experience peaks of up to 10 minutes where the dust measurements spiked above.

MYTCL General Manager and Environment Manager went into extended talks with the farmers and proposed a bilateral agreement that would assist the farmers and ease their concerns for losses claimed due to dust. An area was identified as The Zone of Sensitivity, and a cash assisted settlement per plant was agreed upon within this area. The area itself engulfed most of the Ywatha and Ngarthezsu farmers. Varying from 210 to 260 kyat per plant that would take into considerations the years for losses claimed due to dust. All farms were included, even those who had accepted the 52k/plant crop benefit in 2012. Adjustments were made to ensure fair and consistent benefits.

269,756 plants were assisted totalling 58,269,246 Myanmar Kyat; the approximate equivalent of $1 USD = 1,000 Kyat at the time.

Community & Social Development

In 2015-16 the budget for the Ywatha Village was established at $18,625.43 USD to include electricity extensions and road repair works. For Ngarthezsu the donations were combined as the roads and facilities are shared. In 2016-17 the budget nearly doubled at $34,601 to accommodate the request for the village’s primary project of a school extension.
Separating Yang Tse from the Tebinkan Village is the wandering Dhammapala Creek.

About the Village of Tebinkan

U Thaung Sein is 42 years of age with a great number of responsibilities. His thoughts are for the continual development of his village that go beyond the temporary mining stages.

“It is my wish that MYTCL begin to provide loans for small business such as animal husbandry, and to provide job opportunities and skilled training for those who have very little income.”

There are approximately 995 persons living in this village that is self-sufficient and has the greater part of its inhabitants working in areas outside of the MYTCL copper mine. 47 persons are employed at Myanmar Yang Tse Copper Limited, composing 4.72% of the village’s total population working as occupational miners or in areas related.

• There is 1 Primary School; the village supports electricity that was provided in the Electricity Projects of 2012; there is a Water Dam that was repaired as a donation in the 2014 budget of MYTCL for Community and Social Development Projects.
• The village manages 1 Monastery named Dhammapala.
• The Head Monk of this village is U Awdatha.
• The elected Village Administrator is U Thar Po.

Corporate Social Responsibility

The Tebinkan Village found its inhabitants shifted by the mining activities in the latter part of 2012. Until this time the mine had little to no disturbances to the village or the farmers of this village. In 2012 the mine began to extend its production, and the farms that lay within the lease area were to be taken over as part of the permit awarded by the government. Before these lands were fairly forfeited, considerations were given to the farmers that had been allowed to continue to farm for many years within the lease permit.

Previous mine ownership had made it a policy to not assume any lands until they were required to be utilised into the mine’s activities, and farming had continued directly within the lease. To the south of the mine the farmlands were scheduled for clearing and construction in 2012. An assessment of the area was completed and a Social Impact Plan implemented to provide these farmers with job opportunities, if they desired. Despite the fact that the organisational structure of MYTCL was filled to capacity, additional jobs were created to provide income for those from Tebinkan who wished to join the mining family.

A Resettlement Assistance Package was also created by the Management of MYTCL. Crop Benefits were added as a part of this package to allow the farmers of this area to not only move off of the mine lease as instructed by land-ownership of the government, but to do so with some funding to allow them to relocate, or purchase new lands. The Crop Benefit was provided to purchase crops from the farmers that had not yet been harvested, or that were allowed to be harvested early and used for livestock feed. Peaceful resettlement occurred. Tebinkan farmers and villagers agreed to the packages offered and they moved willingly from the lease areas, taking with them their crops as an added bonus.

Although MYTCL is only the Operator of the Project, and not responsible for the land compensation and is legally not responsible for land issues, the Corporate Culture of the MYTCL Company is to assist in any way possible the surrounding communities. Incorporating CSR with CSD is the first stages of community reinforcement, and the foundations of the MYTCL Good Neighbours Policy.

Community & Social Development

In 2015-16 the budget for the Tebinkan Village was elevated to provide the first stage development of attaining water resources from the Yama Stream, located approximately 4kms away from the village. $30,000 USD had been assigned to this primary development and the Ministry of Water Resources with the Regional Government would assist in the management of the project. As this project is quite complex, MYTCL agreed to work in conjunction with several areas of government. Despite all of the planning the project came to an abrupt halt as the Tebinkan Village changed its mind about retrieving water from the Yama Stream. Instead they demanded that the water come from the Chindwin, located nearly 11kms away.

In 2016-17 the village had shed itself of radical thinking and objectives and requested that a Reservoir extension with pipelines and so forth be included within the annual budget, which would occur over a 2-year fiscal range. A budget of $85,500 USD was set aside for the completion of this project.
Htanaunggon & Ayegone Villages

Far to the east and near the banks of the Chindwin River meanders the peaceful life of these villages.

About the Village of Htanaunggon

There are approximately 628 persons living in this village that is self-sufficient and has the greater part of its inhabitants working in areas outside of the MYTCL copper mine. 4 persons are employed at Myanmar Yang Tse Copper Limited, composing 0.48% of the village’s total population working as occupational miners or in areas related.

- There is 1 High School and the village maintains a tube-well for water.
- The village manages 1 Monastery named Pyinnyapadyathya Parahita.
- The Head Monk of this village is U Nandyu.
- The Village Administrator is Daw Myint Maw.

An estimated 1.69 acres of land have been utilised in the operations of the S&K Project. Although this village is considered a non-impacted village it is still within the circumference of Philanthropic CSR works from the MYTCL project.

About the Village of Ayegone

This village is in the remote areas to the east of the S&K Project and has had no impact from the S&K Project or the Letpadawng Project. There are an estimated 533 inhabitants within the village with only 22 employed by MYTCL. 4.13% of the village populace in total. One remarkable feature of this area is that there are a great number of orphans found in the area, which is run by Buddhist Nuns.

- There is 1 Primary School.
- The village manages 1 Monastery named Sabu Wadi.
- The Head Monk of this village is U Kaung Han.
- The Village Administrator is U Ahga.

Corporate Social Responsibility

Until recently, these 2 villages have not been directly engaged by the mine, although independently both Myanmar Nationals and Expats working in the mines have donated to these villages over the decades. In 2015 it was decided that these villages should be considered for CSR Projects, as they most certainly will be impacted throughout time as the 2 projects expand and enhance the economic situations within the region.

Community & Social Development

Small projects were implemented in 2015-16 focused on building up the villages’ infrastructure such as road repair for $4,296.89. In the 2016-17 budgets a 150kva electricity transformer was added to Htanaunggon’s budget and a fence for the school was constructed for Ayegone. Moving forward the Mobile Medical Team will be considered for expansion and to include these 2 villages on the periphery of the project. Further economic resources and inclusion into future SME Projects of Myanmar Yang Tse Copper Limited will also become focal points for these distant villages.
Banenwechaung & Kyeethakya Villages

Posioned on the North-East banks of the Yama Stream these 2 villages experience dramatic flood events during Monsoon Season from the waterways, and lush green harvests on the same riverbeds during the seasons in between.

There are no CSD Members for these villages as they are not directly impacted and do not require direct villager representative support for donations and community development. CSR does play an important role however, and in the coming years, as with many of the other less impacted villages there will be more emphasis directed onto the community development and CSR programs of MYTCL as focus is placed on SME (Small-Medium Enterprise) Projects.

About the Village of Banenwechaung

Reaching past the boundaries of the S&K Project and onto the opposite side of the Yama Stream by more than 2kms distance, the village of Banenwechaung relies heavily on agriculture, small cottage industry and local commerce. There are approximately 1,070 people that live within the village and find livelihoods in fishing or harvesting other aquatic fauna within their surroundings. 7 employees from this village working at MYTCL, or 0.65% of the village population.

- The name of the Monastery is Thiri Bonpyan.
- The Head Monk is Ashin Laba.
- The elected Village Administrator is U Kyaw Soe.

Similar to Banenwechaung, Kyeethakya is remotely associated from direct mining activities and related occupations are few within the village. There are approximately 1,377 inhabitants with only 16 persons employed at MYTCL, or 1.16% of the populace.

- There is 1 Primary School and manages water and electrical resources on its own.
- This village is quite separated from the mining community, however does request along with Banenwechaung that the MYTCL Mobile Medical Team be a part of their daily lives and visit whenever possible.
- The name of the Monastery is: Thukhawadi.
- The Head Monk is: U Thumana.
- The elected Village Administrator is U Kyaw Soe.

In 2016-17 Banenwechaung requested an ambulance to the sum of $8,250 USD.

Sei Htandawgyi Village

Situated on the northern banks of the Yama Stream and toward Monywa.

About Sei Htandawgyi Village

Of all the villages that fall within the radius of the CSR and CSD Projects for MYTCL, this village has the second greatest number of people not affiliated with the site. 3,300 live in this village, and a mere few 51 persons are hired within the mine, or 1.55% of the village population.

For the 2015-16 CSR/CSD Project for this village was a Community & Social Development project with the school 2-level construction. But we hope that MYTCL can manage this budget as we are over 5 months he explains:

- There is 1 High School, a tube well as well as river water resources.
- This village is quite separated from the mining community and is more engaged in the Monywa activities of the growing city. Farming and logging are identifiable professions for most of the villagers, and few have the desire to work within the mine.
- The name of the Monastery is: Thukhawadi.
- The Head Monk is: U Thumana.
- The elected Village Administrator is U Aung Kyaw Myo.

Corporate Social Responsibility

In the 2016-17 budgets Sei Htandawgyi requested that MYTCL spend 27% of the annual budget on their village alone by building a very large and complex school building. Initially there was some debate regarding the project, and a replacement was suggested at a much more reasonable budget to fit within the annual $500,000 donated CSR/CSD Projects by MYTCL and MEHL. However, the request remained strong and the requirement enforced by government authorities for MYTCL and MEHL to comply, so it will be researched into the coming years’ budgets for completion.

- “I think the most important project we have received from MYTCL is the addition of the Mobile Medical Team services programme for our village.

In my village we understand the budget limits for MYTCL, and that we have asked for a very large project with the school 2-level construction. But we hope that MYTCL can manage this budget as we are a very large village and are in great need of new school facilities that have not yet been provided by the government.

Community & Social Development

The 2015-16 CSR/CSD Project for this village was a $25,000 USD extension to the existing electricity grid that is established within the village areas. Due to the fact that this village is what is considered a second priority or Indirectly Impacted Village with 55.67 acres being utilised in the operations for the S&K Project, and such a large budget being used in the previous year, the 2016-17 budget excluded this village.

For the 2017-18 budgets a 2-storey school building has been requested for the fiscal year that is roughly estimated at approximately $135,000 USD for completion.

In 2016-17 Banenwechaung requested an ambulance to the sum of $8,250 USD.
Folklore illustrates that the S&K mountains’ Spirit that watches over the mine site named Ah May Sandar lives on the Laynyintaung Mountain next to the Dondaw Village.

About the Village of Dondaw

Dondaw is located directly on the lease boundary of the MYTCL S&K Project, and this village has had lands returned to them from the original lease areas of the S&K Project by the President in 2012. Due to this release of lands, the Sabetaung Waste Dump was not completed to design and now the village has a wall of soil perched against the village boundary. This poses a challenge during the Monsoon Seasons as rainfall quickly gathers at the base of the large embankments. Working together with MYTCL, the Dondaw Village inhabitants and CSD Team are constantly improving on the stability of the Waste Dump to ensure sustainability of the area for the future.

U Myint Thein has been on the CSD since its inception in 2013. Previously the Village Administrator, he has a very positive outlook on the works of MYTCL and where he sees his village in the future.

“I think that the CSD Team is an amazing project that MYTCL has created. We (CSD Members) get to visit, talk, discuss and negotiate with other villages regarding their own social and developmental issues. It helps us take back new ideas and pieces to solve the puzzles that we face as leaders in our own villages.”

There are approximately 1,972 persons living in this village that is self-supporting and quite profitable with the cultivation and harvesting of the Betel Leaf all year round as a primary source of income. 92 persons are employed at Yang Tse, composing 4.67% of the village’s total population working within the mining organisation.

As one enters the mountain ranges of the S&K Project, the Tailings Spill crosses the roadways and traverses the landscape towards the river-ways. Today the villagers continue to mine the Tailings despite efforts from MYTCL to clean the previous ownership’s terrible mistake.

- There is 1 Middle School; a tube well for water provided by MEHL and MYTCL; there is also a fence wall constructed for the school donated in the 2014 budget of MYTCL for Community and Social Development Projects. Road repairs and 2 repairs of 2 pagodas were also conducted in 2014 for CSD projects.
- The village manages 4 Monasteries named: Ywaroo, Zayarthirhi Mingalar, Vizawdaryone and Oakepalin.
- The Head Monks of this village are respectably: U Nandawbatha, U Pyinnyawbartha, U Zawtika and U Guna.
- The elected Village Administrator is U Hla Myo.

Corporate Social Responsibility

The Dondaw Village, together with the Kangon Village was offered the largest donation works regarding CSR since the MYTCL organisation took over the S&K Project. In 2014, a total of 83.26 acres of Tailings were removed from the village areas where artisanal miners had stockpiled waste and Tailings from the previous mine activities. Running at a final cost of $15,523.55 USD per acre to remove the Tailings and to cover the area with clayey topsoil to assist with encapsulating any existing ground contamination, exceeded the actual estimated land value of the region. Although records vary and the cost of land is rising, for reference it is estimated that a maximum purchase price of $2,000 USD/acre for best quality farmland can be achieved. With a completion total of $1,125,970.41 USD coming under the estimated budget of $1,950,000.00 USD due to the rejection of land-owners to allow the remaining Tailings to be removed, the Project came to an end in April of 2014. 280,434 cubic metres of Tailings had been removed and placed into the Tailings Storage Facilities on the S&K Project for future rehabilitation. These lands were then returned to the land-owners for habitable re-use.

Community & Social Development

In the 2015-16 CSR/CSD budgets there were a range of items completed for Dondaw, from road repairs to electrical installations. That year the budget ran at $25,540.74 USD.

In the 2016-17 budgets, Dondaw requested further electricity extensions as well as water pipeline extensions to their village inhabitants. This year’s budget increased to $39,500 USD in total after installations.

The Dondaw Village is an active village in the quest for sustainable development. It proactively works with MYTCL as a positive and supporting Stakeholder with the interests of both the Community and the Company in mind. Working with the Village Administrators over the years has always been a peaceful cooperation, and the development of this village remains unhindered through constructive communications with Myanmar Yang Tse Copper Limited Management.
MOBILE MEDICAL TEAM AND HEALTH CARE - MMT

Village to Village CSR Healthcare Initiatives

The Mobile Medical Team CSR Project treated 19,149 patients in 2016 within the villages surrounding the S&K Project totaling $18,808.39 USD for medicines for in-home patient care. Annually, approximately $51,599.22 USD are utilised for Mine Town Hospital and the MYTCL Clinic facility costs, with an additional $130,800.00 USD allocated for overall medical management and staffing of all the MYTCL programs combined. In 2017 a new X-Ray machine has been budgeted to be purchased due to the increase of employees, and to replace older facilities for more state-of-the-art equipment. Since 2015 there have been 2 additional villages assigned to the daily services of the MMT and it is expected that within the next few years that the project will be reviewed for a much larger capacity, resulting in more frequent visits within the villages.

Within the Mobile Medical Care Program there is 1 doctor and 2 nurses that travel to the villages with an ambulance and CSD Team representatives. There are two of these teams in operations; one for MYTCL and one for MWMCL. From Monday through Friday Mobile Medical Teams can be found in a scheduled village assisting with basic health issues and passing along information from the PR & CSD Department. From time to time they also assist with medical emergencies and transportation to nearby medical institutions.

In addition to the monthly group health seminars held at the Mine Town State High School, the health care staff members travel from village to village, holding educational talks at the local schools and in village elders’ homes. They work with government health officials during Clinic Days, and they visit every pregnant woman and every sick child under the age of 5, providing all with individual health care and education.

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As a part of the Nutrition Promotion Program, medical staffs have been monitoring the weight of children under the age of 3 since 2003. There are also a suite of public health activities that focus on ante-natal care that MYTCL associates with the Universal Child Immunization (UCI) Program. This program targets 6 diseases with vaccinations for children under 1-year old, and for pregnant women.

Medical care-giving includes Measles and Hepatitis B inoculations, the prevention and control of blindness due to Vitamin A deficiency, supplements for new-born babies and general health-care and related information for new mothers.

This program includes the following medical preventative care:

1. Diphtheria
2. Pertussis
3. Tetanus
4. Hepatitis B and
5. Encephalitis

These healthcare activities have been both productive and beneficial to all of the communities. Helping children and adults in the MYTCL communities is about allowing people to live healthier lives and within higher quality environments of medical capacities.
The primary objective of successful mine closure is to ensure that the future public health and safety of our community is not compromised.
STATEMENT OF ACTIVITY

In 2016, Knight Piésold Limited (Knight Piésold) progressed a number of environmental and associated engineering studies to aid Myanmar Yang Tse Copper Limited (MYTCL) with the management of slope stability, mine closure and water use into the future.

The projects carried out included:

- Provision of advice and ongoing monitoring of the activities associated with the backfilling of the Sabetaung Pit;
- Closure design for existing and proposed waste rock dumps (WRDs) on the MYTCL site;
- Assessment of the drainage requirements on the northern and eastern faces of the Sabetaung WRD; and
- An option study to identify the most efficient method of stabilising the lower slopes of the Sabetaung WRD so that it would meet the requirements expected by the community due to the proximity of the WRD to adjacent communities; and
- Development of a ‘cap and cover’ trial to establish the adequacy of capping to limit the ingress of water into the WRDs following closure and compare the results obtained with predictions provided in modelling completed.

Knight Piésold has also provided regular on-ground support to MYTCL staff to enable their expertise to be used to build capacity within the MYTCL team.

The studies being progressed and the support provided have been accompanied by a number of recommendations to MYTCL. These recommendations have been discussed and agreed with MYTCL staff and implemented as part of the continuous improvement of the management of environmental issues at the operation.

"Knight Piésold continues to offer its services to MYTCL in 2017 to assist with the development of environmentally sustainable solutions to the operation."

BRETT LONEY
Manager Environmental Services

DAVID MORGAN
Managing Director
The primary Sabetaung Pit undergoes engineered detailed closure.

Yes, it is in a constant state of closure. There are 2 primary phases to closure called ‘Conceptual’ and ‘Detailed’. Since the day we started mining in 2011, as MYTCL, we have designed and instituted a progressive Conceptual Mine Closure Plan. This is not something new, but it is something that many of our Stakeholders do not clearly understand. Closure is not a sprint to the finish, it is a marathon event.

In developing the conceptual and detailed closure plans, reference has been made to Myanmar regulations as well as to international standards, guidelines and best practice including the International Finance Corporation Guidelines, Chinese standards, European Commission ‘Best Available Techniques’ and Western Australian Guidelines. When we state that we are in a constant state of closure, we mean this:

Planning for mine closure will be undertaken little by little throughout our operation’s life cycle. The amount of detail will vary and refocus on specific issues during the course of this life cycle. In order for mine closure planning to be successful, the MYTCL management team needs to ensure it is integrated early into planning rather than being attended to at the end of mine life. The initial groundwork, even at the planning to be successful, the MYTCL management team needs to ensure it is integrated early into planning rather than being attended to at the end of mine life.

After completion of the mining operations, or once a part of the project becomes no longer viable or profitable to operate, closing down, removing all the operation elements and decommissioning of that specific mine domain will take place. A Conceptual Mine Closure Plan will be the basis for the development of a continuing closure plan that will take into account both the legal requirements, as well as the unique environmental, economic and social properties of the operations. This Conceptual Plan will then take the form of an Integrated (Detailed) Mine Closure Plan at the conclusion of each specific area of the operations. To ensure optimal results, it is critical that community and other stakeholder engagement occur throughout the process of planning for mine closure.
Soil Collection & Ecosystem Establishment Mapping

The below map indicates top-soil storage stockpile locations in red colour within the MYTCL lease.

Life of Mine Closure and MYTCL Objectives

During the periods of prior ownership, effective since 1998, mine closure planning activities modestly followed a Conceptual Closure Plan as outlined in the EMS and national conservation and mining laws, consisting of topsoil collection and progressive rehabilitation of key areas within, and outside of the lease project areas. MYTCL has escalated this process and adopted internationally engineered standards of concurrent operational stages of mine closure. This focus continues with revegetation and areas of rehabilitation while intricately planning land-forming for future closure. It is important to indicate that the S&K Project has undergone in the past 4 years, 2012 through 2016, extensive expansion of the mine’s development and the majority of closure planning has taken on the form of closure engineering through professional design for final encapsulation. Top-soil volumes collected, as well as required materials for site-wide encapsulation and rehabilitation have been calculated and allocated to storage areas following world-wide standards for reusable storage.

The key objective of successful mine closure for MYTCL is to ensure that the impending public health and safety of the community is not compromised. The future of the S&K Project operated by MYTCL is dependent on the legacy it leaves. Our reputation is affected if long-term detrimental environmental issues emerge because they have not been appropriately addressed. MYTCL recognises that we need to demonstrate today that we can effectively close the S&K Project with the support of the communities in which we operate. Therefore, our Mine Closure is a process. Mine Completion will be the culmination of the detailed closure activities, and ultimately determines what is left behind as a benefit or legacy for future generations.

The overall objective of Mine Completion is to prevent or minimise adverse long-term environmental, physical, social and economic impacts, and to create a stable landform suitable for lawfully agreed subsequent land use.
MANAGING THE COMPLEXITIES OF COEXISTING ENVIRONMENTS
Sabetaung Closure with International Guidance

Planned mine closure and completion is still at an early stage of development around the world, and there are only a few examples of mine closure planning being applied from conception through to the end of the mine life. This is largely due to the timeframe of most mining operations and the relatively recent development of integrated mine closure planning.

MYTCL’s Mine Closure planning documentation follows the international guidelines and themes outlined in the Leading Practice Sustainable Development Program created by the Australian Government’s Department of Industry Tourism and Resources.

As an integrated part of Mine Closure, MYTCL has defined that the following essential elements are required to achieve mine closure and completion in the context of sustainable development:

- recognising and addressing the issues that the S&K mining operation needs to consider in its planning for closure and completion;
- the development of a risk management approach to mine closure planning that applies from mine operations to post closure and integrated with whole-of-mine-life planning;
- the closure activities associated with each step in the mine life cycle including establishment of a progressive rehabilitation system;
- the processes and tools that can assist the S&K mining operation to achieve good practice in mine closure and completion; and
- the need for engagement with communities and regulators in establishing and implementing closure outcomes and practice.

Aligning with international standards and good to best practices, MYTCL has engaged the consultancy firm of Knight Piésold to develop the design and closure criteria for the S&K Project as a Conceptual Closure Plan. Also, now that the stages of closure are beginning in specific areas of the Sabetaung Pits and the adjoining facilities, MYTCL has developed in cooperation with Knight Piésold a Detailed Closure Plan for the Sabetaung domains and their features.

The S&K Project will be segregated into the following domains:

- ore processing — plant site
- workshops and hydrocarbon storage areas
- waste rock dumps (NAF and PAF)
- tailings storage facility
- process water and raw water dams
- ore
- access roads, exploration tracks and service area infrastructure
- camps and accommodation areas

Each site is unique, and the specification of domains will depend on the final plans for landform, the works to be done, and the potential long-term risk to the environment. Each area (for example waste rock dump, pit, plant site and workshops) is given its own unique domain and project status and managed as an individual entity.

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The ability to progressively rehabilitate sections of the mine site as they become available is an important way of reducing the long-term closure liability. Benefits of progressive rehabilitation include:

- reduction of the overall un-rehabilitated ‘footprint’ of the mine;
- an ability to trial various options and demonstrate rehabilitation outcomes to the wider community;
- showing commitment to stakeholders and employees that the mine has an active mine rehabilitation program;
- reduction of the overall closure costs; and
- the reduction of the risk of failure and ultimate liability.

Throughout the mine’s life, closure strategies will be regularly reviewed to ensure they are appropriate, address the major issues for closure, and remain aligned to community expectations and regulatory requirements. As part of the mine’s change management system, alterations to the mine operating plan, expansions, new pits, waste dumps, or changes to the operating process will trigger a review of closure risk and review of the plan. Using a risk-based approach, a review of the underlying risks to the business and expansions, new pits, waste dumps, or changes to the operating process will trigger a review of closure risk and review of the plan. Using a risk-based approach, a review of the underlying risks to the business and expansions, new pits, waste dumps, or changes to the operating process will trigger a review of closure risk.

An annual review of the closure plan is standard practice for MYTCL, and also the regulators, as they require annual statistics on areas of disturbance, areas rehabilitated in the previous year, and areas yet to be rehabilitated. The closure plan is a key reference document during this process, as it demonstrates the philosophy and strategies to be undertaken. The level of detail reflects the complexity and the maturity of the site.

MYTCL acknowledges the concept of Mine Completion as the goal of mine closure. Assigned a high priority by all levels of management, the integration of the elements outlined in the Mine Closure programs, and in the adoption of the Leading Practice Sustainable Handbook with day-to-day operations, management will allow the S&K Project to reach a state where mining lease ownership can be relinquished and responsibility accepted by the next land user. To achieve this in an environment of increasing regulatory and stakeholder expectations will require superior outcomes developed and implemented in consultation with local stakeholders.

The implementation of this concept of mine completion will result in a more satisfactory social and environmental outcome.
ENCOURAGING NATURE TO RE-ESTABLISH ECOSYSTEMS
ACCOMPLISHMENTS OF THE 2016 CLOSURE PLANNING

The Sabetaung Detailed Mine Closure Plan Activities

At the close of 2016, the strategic framework of the Sabetaung Detailed Mine Closure Plan was successfully in motion. This integrated document was prepared, after meticulous review and revision that had been initiated in October of 2014, to meet the on-site actual data and comprehensive complexities that the S&K Project had developed through several stages of previous ownership. Knight Piésold’s suite of professional geotechnical engineers and consultants was led by Environmental Manager Mr. Brett Loney and approved by its Managing Director, Mr. Dave Morgan. On December 14th, the document was instructed for implementation by the Managing Director and Chairman of MYTCL. This closure plan has been presented to the government authorities, the public stakeholders of the region, and will remain to be a living document as the site progresses and the environmental intricacies change with operations.

Implementations of the Designs

The primary criterion of the design is based upon the successful back-filling of the Sabetaung Pit with ARD/ AMD, or PAF waste produced from the mining operations. Its significant link to environmental conservation is to reduce the footprint of the mine through the utilisation of the void pit by hydraulic neutralisation of the acid-generating and metal-bearing mining debris. This activity, which has been engineered using international methodologies successful in other global operations, will allow the S&K Project to maintain its current use of real-estate and to minimise land-use, or expansion. Closure of the fresh-water Kangon Formation Aquifer will then commence once elevations within the fill have been achieved to complete the next stages of closure applications. Progress is inspected by a designated Inspection Committee from the Ministry of Mines (ME1) and quarterly reports are presented to the authorities for public transcription and transparency of activities. CSD Meetings are held on a weekly basis to identify any ongoing concerns, and the S&K Environment & Operational Development Manager personally escorts guided tours biannually to reveal on site the progress and to answer any question to the visiting Stakeholders.

Progressive Rehabilitation and Revegetation Planning

At the end of 2016, the Sabetaung North Waste Dump was encapsulated with Non-Acid Forming - NAF waste from operations. This activity completed the first of a series of encapsulation activities that will permit the Trial Encapsulation Designs outlined in the Knight Piésold works to embark. The topical areas will be graded to a slope angle that will be sustainable through weathering conditions, and plantations of indigenous species will be trailed to achieve stabilisation of the slopes indefinitely. Previous and pre-determined limitations of the waste dump where slope angles exceed stable conditions have also been considered for future restoration or re-formation.

The Sabetaung South Pit, which has been successfully closed according to the Knight Piésold designs of geotechnical engineer Mr. John Birrell in 2012, reached the stage near the end of 2016 where it was prepared for integrated closure with the Sabetaung Pit and the final land-formation design. At present the focus will be to create a full land-form and water management system to sustain closure after all specific domains have fully completed their distinct mining operations. This will introduce a new design phase of the project. Detailed formations of the domains will then be re-conceptualised and elaborate timelines will be determined for progressive realisation of detailed closure.
The Twin Peaks Wildlife & Conservation Zone

The Twin Peaks Wildlife & Conservation Zone is an expanse that MYTCL has placed aside from impacting operations, and has declared that it will be reserved as a range to maintain and re-establish a natural ecosystem. This area is a combination of 3 mountains, falling into foothills, plains and a creek along the geological boundaries of the S&K Project. Totalling an area of approximately 3-kms2, portions of this expanse have been demarcated as a stockpile area for clays and soils to be excavated for closure requirements of other areas. Seizing an incredible opportunity for aquaculture development, the MYTCL Closure Committee manipulated the contained ground voids and permitted nature to provide pioneering environments to establish wetlands, marshes and breeding grounds for aquatic life, as well as to support the existing fauna of the region. Currently this area, the Tebinkan Wetlands, has quickly taken form. Birds in great numbers have settled onto the lakes that have been created, while fish and crustaceans inhabit the world below. Water is permitted to ebb and flow from this area in a natural state, feeding into the existing waterways of the Tebinkan Creek that courses to the Yama Stream 2-kms away. As the clays are borrowed from this area the wetland’s footprint and capacity will increase. Water will surely be maintained all year round, even during the harsh dry seasons. Life in this area is flourishing.

It is MYTCL’s intent to maintain this buffer zone and to expand the region as part of the Mine Closure planning for the domain.

When will the S&K Project reach Closure Completion?

Completion is still a long way into the future. Ore reserves estimate that we may have up to 20 more years of mining. Then there are intermediate phases of copper production, which are unpredictable. After that follows the final closure stages of planning in detailed form for the remaining facilities and structures. This phase could take up to 5-years. Once this is accomplished there is also a 3-year post-closure monitoring program that MYTCL will initiate with the national government, in order to ensure a successful close and relinquishment of lands.
Top Management Leadership Roles

Great managers consistently engage their teams to achieve outstanding performance. They create environments where employees take responsibility for their own, and their teams, engagement and build workplaces that are engines of productivity and profitability. At MYTCL our leaders create the human environment necessary, leading by example to support the Integrated Management System - IMS and all of its attributes and certifications.

Myanmar Yang Tse Copper Limited’s Chief Engineer
Mr. Sheng Ruguo

Are MYTCL’s community contributions sustainable? Is the company generating positive impacts in local communities?

“We contribute to the economic development of our host communities and the country of Myanmar on the whole through a variety of methods. We recognise that we have the unique ability to improve the local and regional economies around our sites. This is why we are working to create long-term social and economic benefits that do not leave a legacy of dependence on our mining organisation. Our approach to this is multifaceted and incorporates: local hiring and procurement initiatives, including training; capacity building; direct community contributions through donations and investments; and infrastructure investment. Through these activities it is our corporate goal to ensure that the community can stand into the future, and continue to develop independently.”

Process Division Superintendent – U Thein Soe

Mining has actual and potential environmental impacts. What is MYTCL doing to minimise its environmental footprint?

“Our strategy is to identify and proactively mitigate and manage our environmental impacts. We have embedded our environmental stewardship strategy in our sustainable Environmental Management System (EMS), which provides us with a standardised, systematised approach to environmental management in key areas, including specific strategies for Water Stewardship, Energy Management and Tailings Stewardship where I am mostly responsible.”

Mining Division Superintendent - U Than Naing Soe

What is MYTCL's strategy around mine closure and legacy management?

“We are committed to building a positive legacy throughout the mine life, closure and post-closure phases of the cycle. On September 14th 2014, we announced that the Sabetaung Mine was the first mine in Myanmar to be successfully decommissioned and commence closure in accordance with the International Engineering Company of Knight Piésold. In 2015 we created a new section in the Sustainability Report specifically describing our approach to Mine Closure and Reclamation.”

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As you flit through this year’s Sustainability Report exploring the stunning photography of our mine, you may have noticed something quite different that has been infused into the collections of data and information shared by our organisation; the voices of our stakeholders.

I have found that communicating with so many different communities and an unfathomable variety of feelings sometimes leaves us sounding hollow, as if we are just reporting our facts and figures only to be placed on a shelf, forgotten because they are only our words. I was inspired by this conviction to validate and verify our QHSE evidences by turning to you, and to ask you for your views. You told us what you do not understand. You voiced what you need from us, and you instilled in us your view of your world in order to remind us of how important the building of relationships is with you.

Now you can imagine some of the comments were negative, but they are few. Nevertheless, we take note. I respect human rights unconditionally, and your voice has encouraged our leadership teams to find new ways to become more and more transparent so that you will understand what we are doing, and to see how we are sustainable in every aspect of our operations. We have included you in this report because I can see that sharing everything that we do has made a difference to you. I can see positive changes as I walk through the developing villages, as our employees wave to me as I go by, and as I listen to our communities. People are thinking differently about MYTCL.

Vicky Bowman, Director of Myanmar Centre for Responsible Business (MCRB), wrote to us and remarked about last year’s report:

... the 2015-16 Sustainability Report for the S&K Mine by MYTCL is remarkable for giving more weight to some of the aspects of running and closing a mine sustainably. It is more extensive than any report produced by any other investor in Myanmar, certainly any other mining company.

So many opinions validate that MYTCL is the change that is very much needed to ensure that the S&K Project does not create long term negative impacts on the natural environment of this region. This investment provides economic growth that had previously been challenged by an old system of thinking. We need each other. Together we create balance. In 2017 we will focus our energy on bridging the gaps in our understanding of one another.

Have a safe year!

Glenn R. Wallis
Environment & Operational Development Manager