

SECTION D: ENVIRONMENTAL AND SOCIAL CONSTRUCTION MANAGEMENT PLANS

CHAPTER D1: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FRAMEWORK

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1 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FRAMEWORK

1.1 INTRODUCTION

The Oyu Tolgoi Project (the “Project”) is located in the South Gobi region of Mongolia, approximately 550 km due south of Ulaanbaatar and 80 km north of the Chinese-Mongolian border. Oyu Tolgoi is a large, high-grade, porphyry copper-gold mine development Project. The mine will have an initial life of 27 years, which is expected to be extended for a much longer period as ongoing resource evaluation continues to extend the size of the total mineral resource. The Project is fully described in the Environmental and Social Impact Assessment (‘ESIA’) *Chapter A4: Project Description*.

This document (the “Framework”) describes the development, structure, inter-linkages and overall scope, objectives and approach to environmental and social impact management for the Project. These in turn describe the Company’s implementation steps for the mitigation, management, monitoring and assessment measures identified through the ESIA for the Project and also through the detailed environmental impact assessments (“DEIAs”) prepared for Mongolian approvals (i.e., under Mongolian environmental impact assessment (“EIA”) law, as defined below). This document seeks to define the interrelationships between the various environmental and social impact management plans and to define the approach to both Construction Phase Management Plans and Operations Phase Management Plans (collectively referred to as “Management Plans”).

1.1.1 Project Standards

Oyu Tolgoi LLC (the “Company” or “Oyu Tolgoi”) will apply its health, safety and environmental policy (the ‘HSE Policy’) (attached as Annex 1) during all phases of the Project. The Company is committed to meeting the following environmental, social and health and safety (‘HSES’) standards for the Project, collectively referred to as the “Project Standards” (and discussed in Section 1.3 below). Project Standards are defined in each Management Plan and draw from the following sources:

- The laws and regulations of Mongolia, including the Law of Mongolia on Environmental Impact Assessment dated 22nd January 1998 and amended on 22 November 2001 (“Mongolian EIA Law”);
- Mongolian regulatory permit conditions as set out principally in the approved DEIA reports for the Project facilities and the Environmental Protection Plan (“EPP”) contained within each DEIA;
- The Investment Agreement of 6 October 2009 between the Government of Mongolia, Ivanhoe Mines Mongolia Inc (now Oyu Tolgoi LLC), Ivanhoe Mines Limited and Rio Tinto International Holdings Limited (“IA”); and
- The environmental, health & safety and social policies, standards and requirements of applicable international financial institutions, as identified in *Section 1.3.3* of this Framework.

In line with international good practice, compliance with these Project Standards is managed by Oyu Tolgoi through the establishment and implementation of environmental and social impact management systems for the management of impacts identified by the Company in the ESIA (as discussed in section 1.2 below).

1.1.2 Environmental and Social Impact Management Systems

For the construction phase of the Project, the environmental and social impact management systems comprise:

- a Health & Safety Management System (“HSMS”);
- an Environmental Management System (“EMS”); and
- a Social Management System (“SMS”).

Collectively, these form the Oyu Tolgoi Health, Safety and Environmental Management System (*Practice A2MW 653 8000 Dated 10 January 2006*) representing the construction phase practices, procedures, requirements and commitments of the Oyu Tolgoi Project Management Team (“PMT”) and Fluor

Corporation (“Fluor”), Oyu Tolgoi’s Project Management Contractor (“PMC”), and referred to in this document as the “Construction Phase Management System”.

Impacts addressed by specific health, safety, environmental and social management and monitoring actions for the construction phase are documented in the Project ESIA and are implemented through a series of topic and activity-specific environmental, social and health & safety management plans (“EMPs”, “SMPs” and “HSMPs” respectively) that form the relevant parts of the Company’s Construction Phase Management System (collectively referred to as the “Construction Phase Management Plans”).

For the Project operations, decommissioning and closure phases, the HSMS and EMS will be combined into an integrated Health, Safety and Environment Management System for the Project (the “2012 Oyu Tolgoi HSE MS”) that will be implemented in 2012 in line with standard Rio Tinto management practice to meet the Rio Tinto Environmental Management System Standard and the Rio Tinto Safety Standards.¹ In addition, it will incorporate elements of the SMS (which will continue to be aligned to meet the requirements of the Rio Tinto Communities Standard). In accordance with Rio Tinto practice, the 2012 Oyu Tolgoi HSE MS will be certified to the ISO14001 environmental management standard. The resulting activity-specific operations-phase management plans (collectively referred to as the “Operations Phase Management Plans”) will be developed by the Company as anticipated in the ESIA, in compliance with the Project Standards listed above.

1.2 ENVIRONMENTAL AND SOCIAL IMPACT MANAGEMENT PLANS

1.2.1 Overview of Development Approach

The development of environmental and social impact management plans for the Project is a two-stage process:

- **Stage 1: Construction Phase:** Construction Phase Management Plans to control the HSES management aspects of day-to-day construction activities that are managed with Fluor acting as the Project Management Contractor (PMC), comprising the following four major areas of project development: process plant (concentrator), infrastructure, Shaft No. 2 above-ground works and site services. These areas of project development are all scheduled to be completed by the end of December 2012 at which time the Construction Phase Management System will cease to operate and all Oyu Tolgoi activities will be conducted in accordance with the 2012 Oyu Tolgoi HSE MS.
- **Stage 2: Operations Phase:** Operations Phase Management Plans will be detailed plans that control the environmental and social impact management aspects of all Project activities following the end of the Phase I construction (and will be effective 1 January 2013).

Further details of the Construction Phase Management Plans and the Operations Phase Management Plans are provided below in Sections 1.2.3 and 1.2.4 respectively.

1.2.2 Scope and Purpose of Management Plans

The Construction Phase Management Plans and Operations Phase Management Plans address the management of HSES aspects associated with the Oyu Tolgoi Project. The scope of coverage for the Construction Phase Management Plans and Operations Phase Management Plans, and the systems used to implement those Plans is defined as follows:

- The physical and biological environment (as they may be affected by activities associated with on-site and off-site Project facilities), managed during the construction phase under the Oyu Tolgoi Construction Phase Management System, and during the operations phase under the 2012 Oyu Tolgoi HSE MS, including biodiversity, air quality, water resources, waste management, transportation, emergency response, mine closure and rehabilitation and health and safety;
- Social and community issues which are managed under the Oyu Tolgoi SMS during the construction and operations phases. The SMS is aligned to the Rio Tinto Communities

¹ Further details of these management system standards can be found at www.riotinto.com/library/3608_policies.asp

Standard, and some issues that involve both community issues and HSES issues are managed jointly under the integrated 2012 Oyu Tolgoi HSE MS. Social issues addressed under the SMS include issues related to community relations, consultation and stakeholder engagement, labour/worker management, community health & safety, influx management, resettlement, cultural heritage, regional development and other potential socio-economic impacts of the Project on third parties; and

- Occupational health and safety (OHS) issues that are managed for the Project construction under the Oyu Tolgoi HSMS and the health and safety management systems operated by its principal contractors (Fluor and Redpath), and for the operations phase under the integrated 2012 Oyu Tolgoi HSE MS.

The suite of activity-specific Construction Phase Management Plans describes:

- the Project Standards;
- Detailed mitigation and control measures to be implemented, including details of the activities to which the specific measure applies, responsible parties and the means of verification. The mitigation measures have been developed to meet the identified Project Standards;
- Detailed monitoring and oversight requirements;
- Topic-specific training requirements; and
- Topic-specific key performance indicators.

Operations-Phase Management Plans will be developed as part of the 2012 Oyu Tolgoi HSE MS.

1.2.3 Construction-Phase Management Plans

The Construction Phase Management Plans address the HSES aspects (as defined in *Section 1.2.2*) associated with day-to-day construction activities during the construction phase of the Project. The suite of Construction Phase Management Plans comprises the following:

Construction Phase Environmental Management Plans

- Atmospheric Emissions Management Plan (including Greenhouse Gas Emission Management);
- Noise & Vibration Management Plan;
- Topsoil Management Plan;
- Petroleum & Fuels Management Plan;
- Flora and Fauna Management Plan;
- Water Resources Management Plan;
- Waste Management Plan;
- Transport Management Plan;
- Hazardous Materials Management Plan;
- Emergency Response Plan; and
- Mine Closure Framework

Construction-Phase Social Management Plans

- Cultural Heritage Management Plan;
- Stakeholder Engagement Plan;
- Resettlement Action Plan;
- Influx Management Plan;
- Labour Management Plan; and
- Community Health, Safety & Security Management Plan.

Construction Health & Safety Management Plans

- Worker Health & Safety Management Plan, which summarises the requirements and procedures of:
 - The 2006 Oyu Tolgoi Project HSE MS, implemented by Fluor, for above ground construction activities; and
 - The 2010 Oyu Tolgoi HSE MS implemented by Redpath for underground development activities.

1.2.4 Operations Phase Management Plans

The Operations Phase Management Plans set out detailed approaches, methods and procedures to avoid, manage, mitigate and offset operations-phase impacts and ensure Company and contractor compliance with Project Standards, and Rio Tinto Health and Safety Standards.

Operations Phase Management Plans will control the HSES aspects of all Project activities following the end of the Project construction-phase (which is scheduled for December 2012) The Operations Phase Management Plans will:

- follow the same basic format as the Construction Phase Management Plans and have five key sections:
 - Introduction;
 - Planning;
 - Implementation and Operation;
 - Performance Measurement; and
 - Responsibilities and Accountabilities.
- specifically include all applicable environmental and social impact management, mitigation and monitoring controls based on the impacts identified in the Project ESIA for operations-phase activities;
- set out how the Project will meet Project Standards as defined in Section 1.1; and
- be consistent with applicable Rio Tinto Standards and Guidelines.

As part of operational readiness preparations, the Oyu Tolgoi Project is currently undergoing an integration process to develop operations-phase management procedures across all areas of operation that meet Rio Tinto Standards and Guidelines. The Operations Phase Management Plans described in this Framework are being developed as part of this process. This will help to ensure that Management Plans are designed from the outset in an integrated manner to manage impacts identified in the ESIA and also to meet the Project Standards and Rio Tinto Standards and Guidelines.

Operations Phase Management Plans are expected to include the following:

Operations Phase Management Plans

- Atmospheric Emissions Management Plan (including Greenhouse Gas Emission Management);
- Noise & Vibration Management Plan;
- Hazardous Materials and Contamination Control Management Plan;
- Biodiversity Management Plan;
- Land Use Management Plan;
- Water Resources Management Plan;
- Mineral Waste Management Plan;
- Non-Mineral Waste Management Plan;
- Transport Management Plan;
- Emergency Response Plan;

- Occupational Health and Safety Plan; and
- Mine Closure Plan (this includes social aspects and is also listed as a Social Management Plan below).

Operations Social Management Plans

- Cultural Heritage Management Plan;
- Stakeholder Engagement Plan;
- Resettlement Action Plan;
- Influx Management Plan;
- Labour Management Plan;
- Community Health, Safety & Security Management Plan; and
- Mine Closure Management Plan (this includes environmental aspects and is also listed as an Environmental Management Plan above).

The Operations Phase Management Plans will be completed and ready for implementation prior to the commencement of Operations.

1.3 PROJECT POLICIES AND STANDARDS

1.3.1 Overview

This section provides a summary of the policies, legal and regulatory requirements and other applicable standards relevant to the Management Plans. The specific Project Standards adopted by the Project are defined in each Management Plan.

1.3.2 Oyu Tolgoi Policies

The HSE policy has been adopted as part of the Construction Phase Management System. This policy applies to Oyu Tolgoi and all activities carried out by Oyu Tolgoi during all phases of the Project. A copy of the policy is attached at Annex 1. Mongolian Requirements

A list of applicable relevant national legislation is maintained through the Project's Construction Phase EMS. ESIA *Chapter A2: Policy & Legal Framework*, Section 2.4 provides an overview of the key Mongolian legislation applicable to the Oyu Tolgoi Project. This includes Mongolian environmental and health and safety standards applicable to the Project, which are further described in ESIA *Chapter A2: Policy & Legal Framework*, Section 2.5.

1.3.3 International Standards

The international standards which are applicable to the Project are:

- International Finance Corporation (“IFC”) Performance Standards on Social and Environmental Sustainability (2006);
- Applicable good international industry practice (GIIP), where such practice is defined, in line with IFC standards, as:
“The exercise of that degree of skill, diligence, prudence and foresight that would reasonably and ordinarily be expected from skilled and experienced professionals engaged in the same type of undertaking under the same or similar circumstances globally.”
- Performance Requirements of the European Bank for Reconstruction & Development (2008).

ESIA *Chapter A2: Policy & Legal Framework* Section 2.8 provides an overview of the applicable international standards and guidelines (based on requirements of GIIP identified by International Financial Institutions such as the IFC) that form part of the Project Standards, including any treaties and conventions that have the force of law in Mongolia (which are described in ESIA *Chapter A2: Policy & Legal Framework* Section 2.6).

1.4 HSE AND COMMUNITY DEPARTMENTAL LINKAGES

As recognised in the ESIA, there are a number of cross-sectoral issues that require an interface to occur between the Company's Environment Department² and the Communities and Social Performance (CSP) Department. Implementation of management controls and monitoring procedures associated with these interface points requires coordination between the two departments, and these interface points are represented with cross-references in relevant EMPs, HSMPs and SMPs.

The most significant interface points between the Environment Department and the CSP Department are:

- **HSE Policy:** The HSE Policy defines long term, meaningful relationships with Project communities as a foundation of the HSE Management System. Although the HSE Policy does not prescribe a specific interface between the Environment Department and the CSP Department, it facilitates collaboration between the two, which is then implemented through the respective Management Systems. The HSE Policy is set out in Annex 1 attached.
- **Environmental Impact Assessment ("EIA") for Mongolian Approvals:** The first formal interface point occurs when consultants complete community consultations are undertaken as part of the EIA for new projects under the Mongolian EIA Law. If required, a DEIA must be prepared and submitted for approval. This process is managed by environmental consultants approved by the Ministry of Environment, and the consultants liaise with the Oyu Tolgoi CSP Department when defining the most suitable community consultation exercises. This consultation is a legislated process, and is not prescribed in an internal Project procedure.
- **Land Disturbance Permit Surveys and Discussions:** Land disturbance related surveys and discussions occur with the community prior to land disturbing activities occurring outside the Mine Licence Area. These surveys and consultations are an Oyu Tolgoi internal requirement and differ from those completed during the Mongolian EIA approvals process, in that they are targeted, prescriptive, and occur immediately prior to the disturbance being undertaken. In the months leading up to any proposed land disturbance, community discussions and environmental, archaeological and ethnographic surveys will be completed to ensure that land disturbing activities conform to all Oyu Tolgoi Project Standards and procedures as defined in the Management Systems. Oyu Tolgoi's internal Land Disturbance Permit procedure is initiated by the Oyu Tolgoi Environment Department; however, archaeological and ethnographic surveys are led by the CSP Department. These processes are outlined in the Oyu Tolgoi Land Disturbance Permit Procedure which forms part of the Construction Phase Management System, and will also be incorporated into the 2012 Oyu Tolgoi HSE MS.
- **Risk Registers:** Community risks are integrated into environmental risk registers, in addition to community risks also being assessed as part of the work of the CSP Department. This process is led by the Environment Department, with technical advice from the CSP Department if required. This process is outlined in the Risk Assessment Workshop Procedure.
- **Objectives, Targets and Improvement Plans:** Where defined by the Management Systems, objectives, targets and improvement projects that require input from the CSP Department are defined in consultation with the CSP Department. For example, the 2011 Environmental Improvement Plan includes a number of actions that are the responsibility of the CSP Department. The Environmental Improvement Plan process is outlined in the EMS System Manual.
- **Contractor Compliance:** Contractor compliance inspections are initiated by the Environment Department, and the CSP Department is invited to attend when these inspections occur. These inspections are either scheduled as part of the Audit and Assessment Schedule, or defined as part of the Land Disturbance Permit Process.
- **Community Engagement:** Regular community forums and community discussions occur across the range of Project activities. These processes, which enable issues of concern or questions to be raised, are led by the CSP Department, with an invitation extended to the Environment Department where technical expertise on environmental issues is required.

² The Environment Department is interchangeably referred to as the Health, Safety and Environment Department

Corrective actions generated from feedback or complaints may result in the Environment Department coordinating community-based projects.

- **Emergency Response:** Certain emergency response procedures require input from the CSP Department. An example of this is off-site fires or chemical spills that require areas to be quarantined from community and animals. These processes are led by the Emergency Services Department, with input from the Environment Department and the CSP Department as required. The spill response process is outlined in the Spill Response Procedure.
- **Participatory Environmental Monitoring:** The community-based participatory environmental monitoring programme is led by the CSP Department. This programme aims at engaging the community in the monitoring of environmental parameters that most impact their lifestyle and livelihoods. Technical input is sought from the Environment Department where this is deemed necessary by the CSP Department. This process is outlined in the Participatory Monitoring Procedure, which is a component of the SMS. A significant component of the Environment Department's monitoring programme relate to community concerns regarding environmental issues including water, dust, noise and pastureland. Additional environmental monitoring that is required to better understand a community concern is identified through the community feedback / complaint process. The monitoring is led by the Environment Department, and guided by the Environmental Monitoring Procedures.
- **Management System Review:** The Environment Department and the CSP Department form part of the multi-disciplinary group that will participate in the annual management system review. This annual meeting involves a review of all components of the Management Systems (Construction Phase and the 2012 Oyu Tolgoi HSE MS) for effectiveness and suitability, with the aim of continuously improving the management system. This process is led by the Environment Department and is described in the EMS Manual.

1.5 ROLES & RESPONSIBILITIES

Roles and responsibilities are defined below for the Project Construction Phase. Operations Phase roles and responsibilities will be documented in the Operations Phase 2012 Oyu Tolgoi HSE MS and the Operations Phase Management Plans.

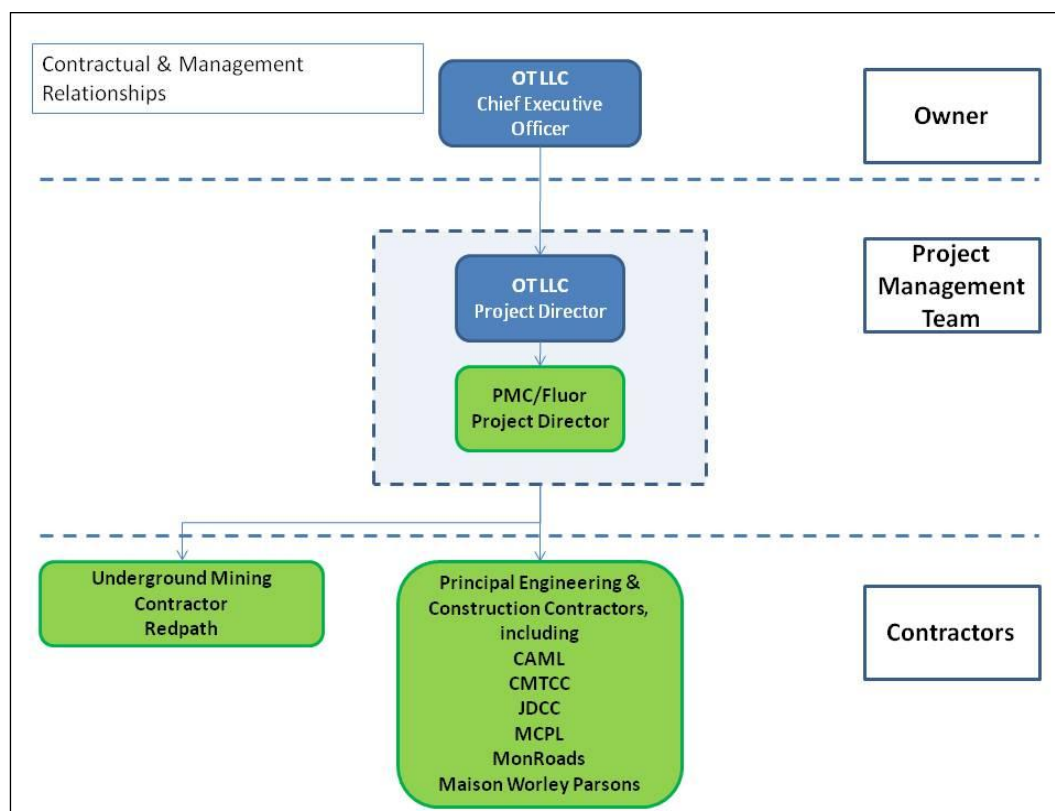
1.5.1 Oyu Tolgoi Project Management Team

The Oyu Tolgoi Project Construction Phase is led by a Project Management Team (PMT). Oyu Tolgoi has appointed Fluor as the Project Management Contractor (PMC) who works with key members of Oyu Tolgoi to form the PMT. The PMT reports to the Oyu Tolgoi Project Director. The PMT has primary responsibility for coordinating the activities involved in the four major areas of project development: process plant (concentrator), infrastructure, Shaft No. 2 above-ground works and site services.

The PMC Project Director and his team coordinate project execution.

The key roles, responsibilities and reporting relationships are summarised below.

Figure 1.1: Oyu Tolgoi Key Relationships



Note: As at 1 January 2012

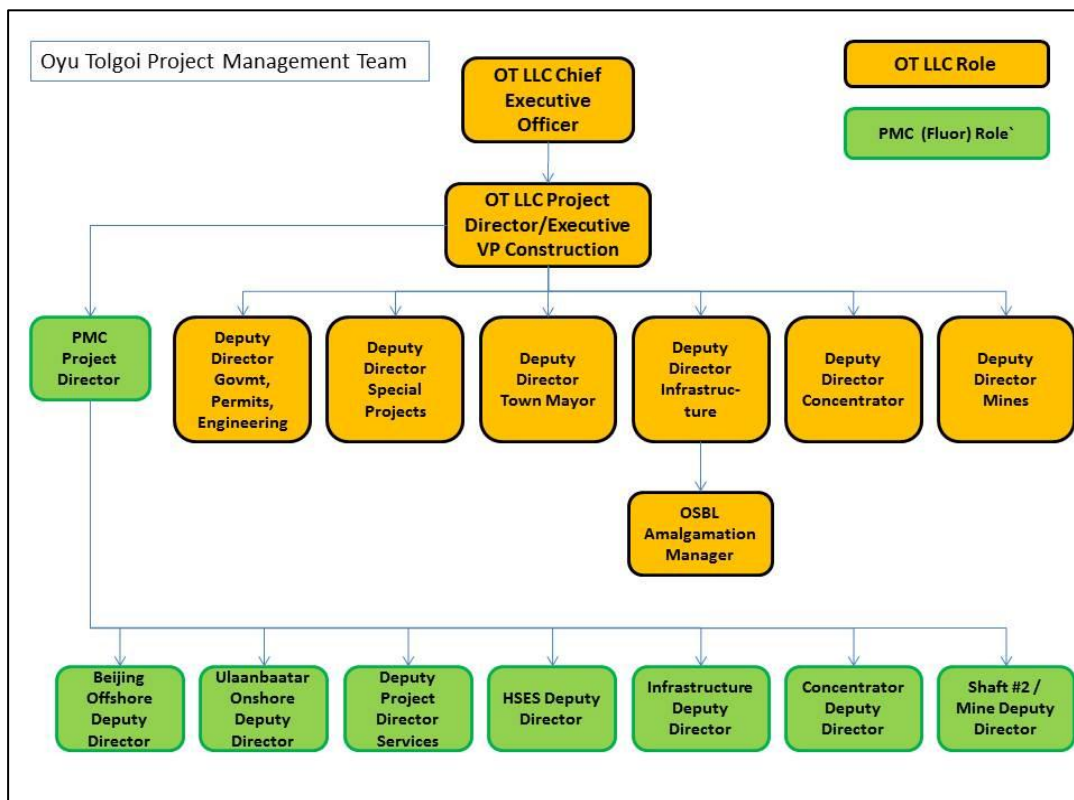
Figure 1.1 illustrates the interfaces between:

- Oyu Tolgoi as the **Owner**;
- The **Project Management Team** (comprising both Oyu Tolgoi and Fluor management in an integrated team) which is responsible for execution and delivery of the Project on time, within budget and in compliance with Project Standards and other requirements; and
- The **Contractors** who are responsible for implementation of the Project requirements under the supervision and control of the Project Management Team.

The Project Management Team contains HSE management capabilities as outlined above. In practice, the Oyu Tolgoi Environment Department has assumed control and oversight of environmental management issues and works in coordination with the Project Management Team HSE function to supervise the activities of contractors both on-site and off-site.

The Environment, CSP and Health & Safety functions within Oyu Tolgoi represent the Owner and coordinate with and communicate to the Project Management Team any instructions and/or requirements from the Owner. These functions perform an audit and monitoring role with regard to Contractors. Any non-conformances or other issues are communicated to the Project Management Team for action.

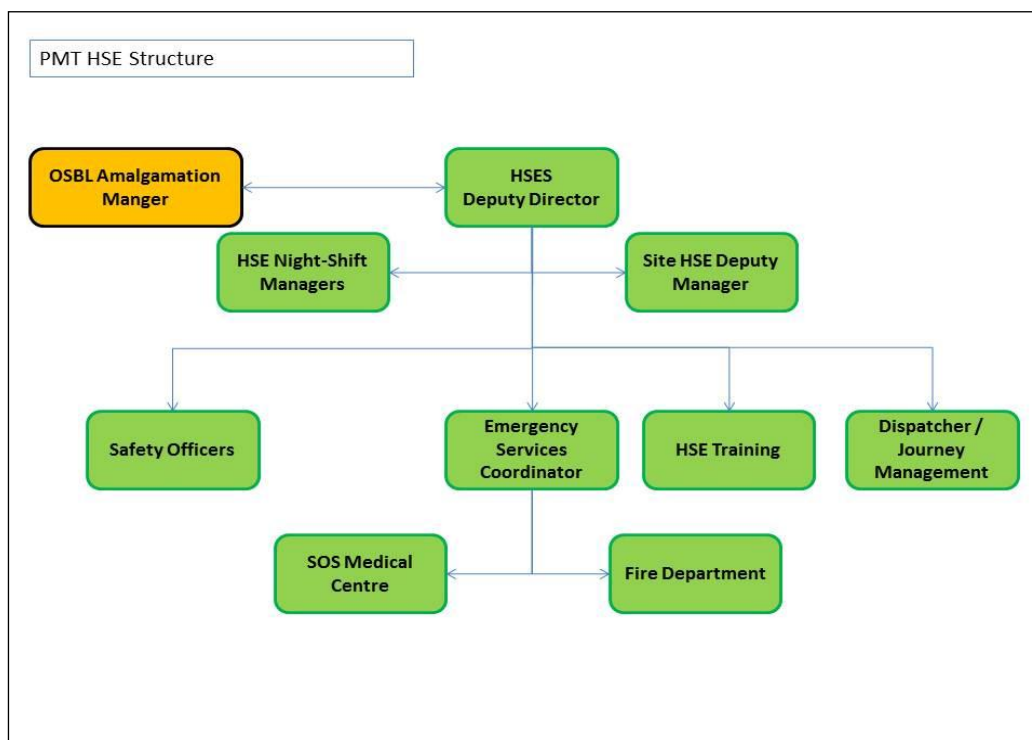
Figure 1.2: Key Roles & Responsibilities within the Project Management Team



Note: As at 1 January 2012

The structure of HSE management within the PMT is set out below.

Figure 1.3: Project Management Contractor - Key HSE Roles



Note: As at 1 January 2012

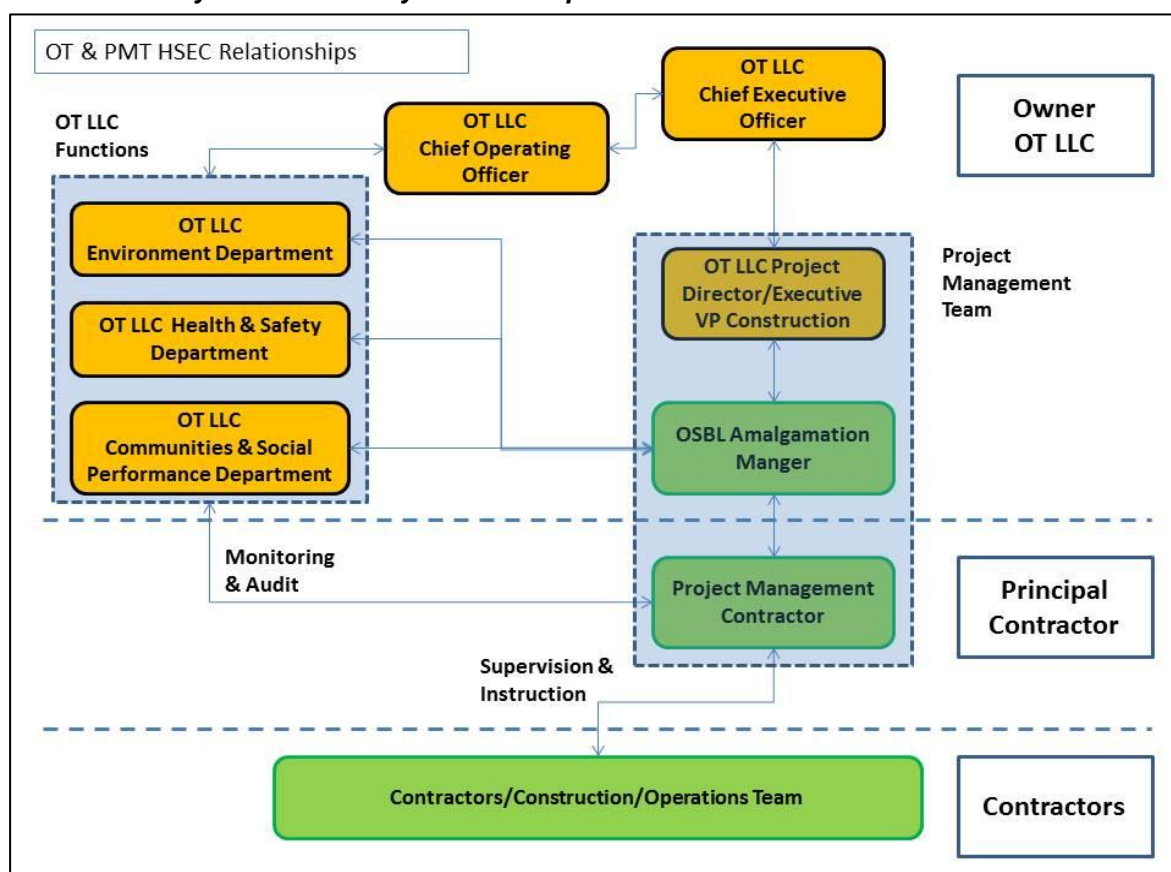
Outside Battery Limits (OSBL) Amalgamation Manager

To improve the coordination and proactive management of environmental, community and health & safety issues between Oyu Tolgoi (as the Owner), the Project Management Team and the Contractors, a specific coordination role has been established. The Outside Battery-Limits (OSBL) Amalgamation Manager role has been created to act as the primary interface/single point of contact between the Oyu Tolgoi Environment and Community Relations functions and the Project Management Contractor. The OSBL Amalgamation Manager must:

- Provide timely information regarding scheduled construction activities, principally those outside the Mine Licence Area [which have potential impacts on local communities to ensure that appropriate consultation occurs before and during construction activities];
- Collect, review, and disseminate information from the Oyu Tolgoi Environment and Community Relations functions (feedback/complaints/comments) regarding construction execution or impacts; and
- Work with the Oyu Tolgoi Environment and Community Relations functions to pro-actively prevent and resolve problems.

These relationships are set out below.

Figure 1.4: Oyu Tolgoi, Project Management Team and Contractor Environmental, Health & Safety and Community Relations – Key Relationships³



Note: As at 1 January 2012

³ Reflects Oyu Tolgoi organisational structure as at 1 January 2012; nomenclature subject to change as the structure evolves and is improved (e.g., formation of Communities and Social Performance Department at end of 2011).

The Project environment, health, safety and security personnel in place during the construction-phase are as follows⁴:

- Oyu Tolgoi Environment Department – 48 staff;
- Oyu Tolgoi Communities and Social Performance Department – 46 staff;
- Oyu Tolgoi Health and Safety Department – 12 staff;
- Fluor HSES Department – 70 staff; and
- Redpath Safety Department – approximately 20 staff and underground volunteers.

1.6 RESPONSIBILITIES FOR THE CONSTRUCTION-PHASE HSE MANAGEMENT SYSTEM

Responsibilities for the Construction Phase Management System have been integrated into procedures, and extend to all personnel, contractors, subcontractors, service providers and activities at Oyu Tolgoi. A summary of accountabilities under the Project EMS is given below.

Table 1.1: Roles & Responsibilities under the Oyu Tolgoi EMS

Roles	Responsibilities
Chief Executive Officer, Chief Operating Officer and Executive Director – Construction	<ul style="list-style-type: none"> ▪ Ensure that the management system is maintained and is fit for purpose. ▪ Ensure that the members of the Senior Management Team comply with and support the implementation of the management system. ▪ Ensure operations are sufficiently resourced with competent and trained personnel to comply with the requirements of the management system.
Oyu Tolgoi and Primary Contractor Operational Department Managers	<ul style="list-style-type: none"> ▪ Ensure that the requirements of the management system are met in workplaces under their management. ▪ Ensure staff and contractors under their supervision are trained and competent to implement all requirements of the management system.
Oyu Tolgoi Environment Department	<ul style="list-style-type: none"> ▪ Advise and support staff and contractors consistently with the requirements of the HSE management system. ▪ Ensure the HSE management system is operating and that the system is continuously improving.
HSE Environmental Leader	<ul style="list-style-type: none"> ▪ To provide support and on-the-ground assistance to operations (including contractors) towards the implementation and maintenance of Oyu Tolgoi's HSE MS requirements. ▪ To provide a support and mentoring service to assist other employees and contractors in their work area to achieve conformance with the ISO14001 Standard. ▪ To lead, facilitate or assist with the investigation of HSE incidents and development and implementation of corrective and preventative actions.
All Staff & Contractors	<ul style="list-style-type: none"> ▪ Make themselves available for training, risk workshops, meetings and inspections. ▪ Comply with all operational procedures and legal requirements applicable to their jobs. ▪ Report environmental incidents, accidents and improvement opportunities as they become aware of them.

The Executive Vice President – Construction⁵ and Chief Operating Officer retain overall accountability for the adequacy, maintenance, implementation and certification of the Environmental Management System.

⁴ Reflects Oyu Tolgoi organisational structure as at 1 January 2012.

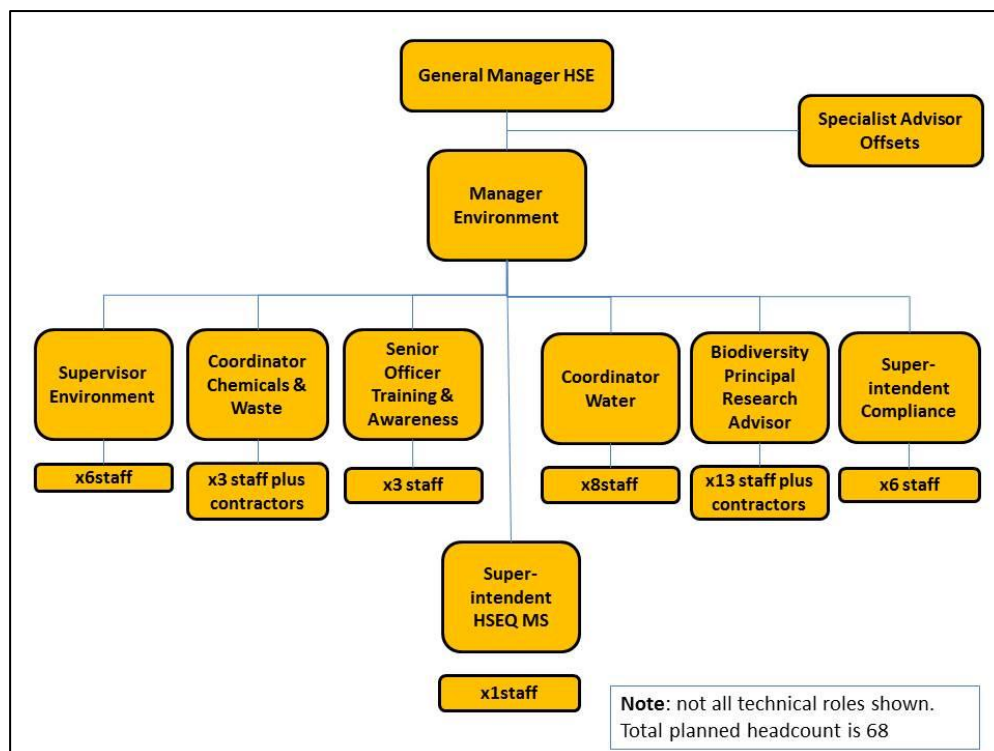
⁵ Also referred to as the *Oyu Tolgoi Project Director* in this document.

The Oyu Tolgoi Environment Department ensures that the requirements of the EMS are met in all activities. However, the Principal Environmental Advisor has been delegated accountability for:

- Ensuring that the Management System has been established, implemented and maintained in accordance with the requirements of ISO14001; and
- Reporting to senior management on the performance of the Environmental Management System for review, including recommendations for improvement.

Key positions in the Oyu Tolgoi Environment Department are shown below.

Figure 1.5: Oyu Tolgoi Environment Department – Key Positions⁶



Note: As at 2 June 2012

All staff and contractors maintain general responsibilities under the EMS. These include ensuring that the following are adhered to and/or undertaken:

- the Oyu Tolgoi HSE Policy;
- the procedures for tasks performed;
- how to report incidents;
- the training required for their role;
- how their team communicates problems and improvements;
- the risks and controls for their work;
- the inspections to be completed (for supervisors);
- that all staff have the authority to stop work for unsafe tasks; and
- who to talk to for problems or queries.

⁶ Reflects Oyu Tolgoi organisational structure as at 2 June 2012; nomenclature subject to change as the structure evolves and is improved.

The Oyu Tolgoi Environment Department assists where technical skills, know-how and inputs to assist or implement the EMS are required. Contractor managers are responsible for ensuring contractors understand their responsibilities under the EMS.

1.7 RESPONSIBILITIES FOR CONSTRUCTION-PHASE SOCIAL MANAGEMENT SYSTEM

Responsibilities for social impact management have been integrated into the Project procedures, and extend to all personnel, parties and activities at Oyu Tolgoi. The SMS is aligned to the Rio Tinto Communities Approach as outlined in the Rio Tinto Communities Standard.

A summary of key roles and responsibilities is given below.

Project Management Team & Project Manager

The Vice President – Regional Development & Communities retains overall accountability for the adequacy, maintenance, implementation and certification of the SMS. However, the Manager – Community Relations has been delegated accountability for:

- Ensuring that the SMS has been established, implemented and maintained in accordance with the requirements of the Rio Tinto Communities Standard; and
- Reporting to senior management on the performance of the SMS for review, including recommendations for improvement.

Manager – Community Relations

The Manager – Community Relations is responsible for:

- Reporting on the performance of the SMS to Oyu Tolgoi;
- Coordination with the Oyu Tolgoi Environment Department;
- Conducting reviews of the SMS;
- Providing management support and direction to the Community Relations team; and
- Conducting socio-economic and community monitoring, including the monitoring of legal & other requirements.

Information Management System (IMS) Coordinator

The IMS Coordinator is responsible for:

- Providing support to the Manager – Community Relations for completion of SMS activities, including collection of information for reporting;
- Control of SMS documentation; and
- Distribution and management of communication items.

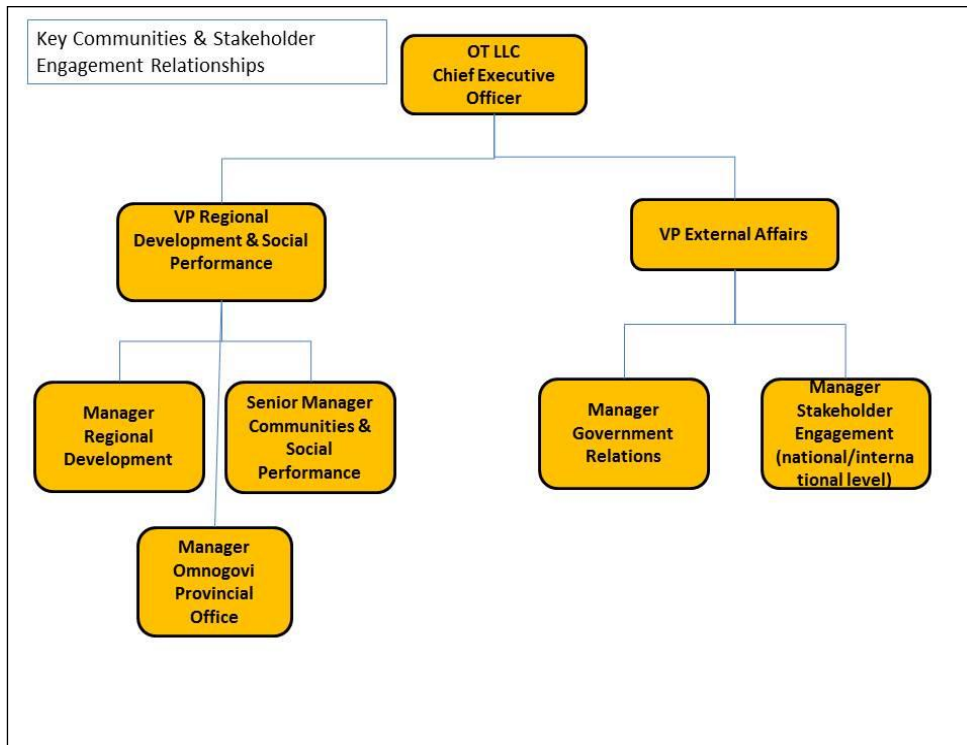
1.7.1 Responsibilities of Communities and Social Performance (CSP) Department Members

All CSP Department staff and contractors maintain general responsibilities under the Social Management System. All staff and contractors are required to:

- Appreciate the importance of effective social management throughout Project design, development, construction and operation;
- Identify and manage social aspects associated with activities over which they have control or influence;
- Notify the Oyu Tolgoi Project Management Team of significant social aspects; and
- Support/facilitate the completion of activities required by the Oyu Tolgoi Project SMS.

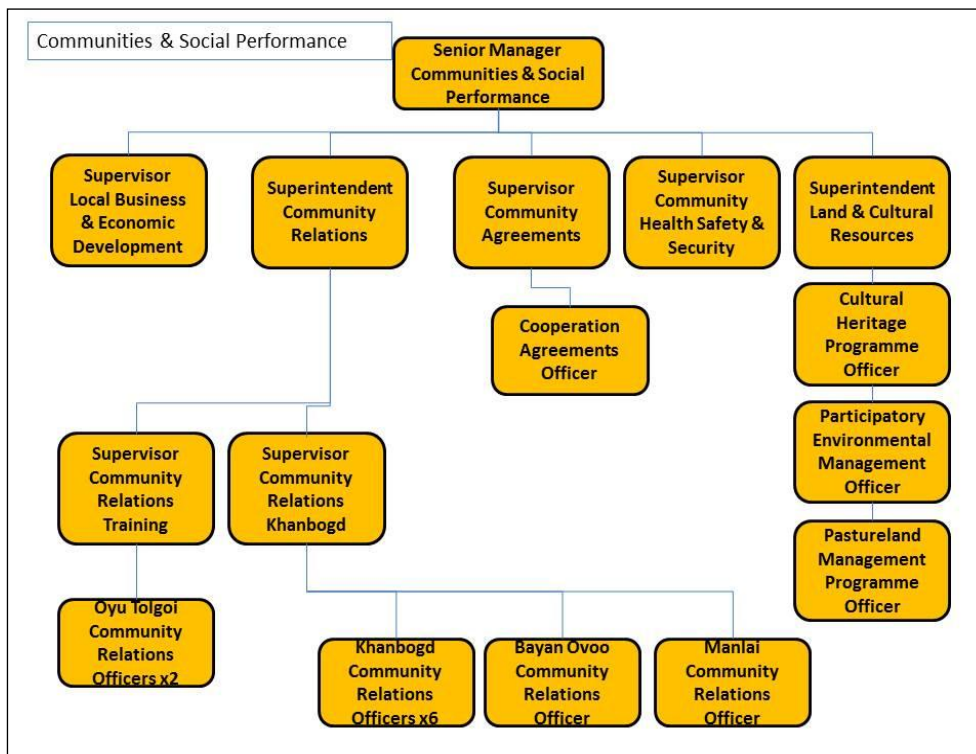
Key positions within Oyu Tolgoi related to community relations, regional development and external relations are shown below.

Figure 1.6: Oyu Tolgoi Regional Development, Communications & External Affairs – Key Positions



Note: As at 1 January 2102

Figure 1.7: Oyu Tolgoi Communities & Social Performance– Key Positions



Note: As at 1 January 2012

1.8 MANAGEMENT PLAN RESPONSIBILITIES

Responsible parties for the implementation of specific mitigation and monitoring controls are defined within each Construction Phase Management Plan.

Contractor Management

Oyu Tolgoi has developed the following procedures that define contractor health, safety, environmental and social requirements and management controls:

- Environmental Management Plan – Contractor Requirements; and
- Environmental Management Plan – Contractor HSE Management Plan Guidelines.

These procedures set out the requirements and the nature of the management control relationship of Oyu Tolgoi towards its contractor(s) and provide guidance to contractors on the identification and management of HSE risks and impacts.

The objective of the HSE Management Plan Guidelines is to ensure that contractors engaged in work on the Oyu Tolgoi Project identify the significant health, safety and environmental aspects of their activities and ensure strategies are developed and implemented to minimise and/or mitigate impacts. The management strategies must be documented by the contractors in an HSE Management Plan and the HSE Management Plan is used as a tool to demonstrate continuous improvement.

The Contractor HSE Management Plans must also include a commitment to comply with all applicable Oyu Tolgoi HSE Policies and Procedures, the Project Standards set out in this Framework, and the Oyu Tolgoi Management Plans. Responsibilities for ensuring the development and implementation of the Contractor HSE Management Plans are as follows:

- Oyu Tolgoi contractors are responsible for the integration of the Oyu Tolgoi HSE Policies and Procedures, Project Standards and other applicable requirements into their activities as far as applicable; and
- The Oyu Tolgoi OSBL Amalgamation Manager and the respective Oyu Tolgoi Departments are responsible for approving, and overseeing adequate implementation of the Oyu Tolgoi Policies and Procedures, Project Standards and other applicable requirements by Oyu Tolgoi contractors.

Contractor management by Oyu Tolgoi benefits from the construction-phase environmental, social, health and safety (ESHS) risk assessments performed by an independent environmental and social consultant (IESC). These two assessments were conducted in 2011 and, where appropriate, recommendations were incorporated into Oyu Tolgoi's contractor management processes. While Oyu Tolgoi's contractor management procedures provide the mechanism for Oyu Tolgoi to ensure that its contractors comply with the HSE obligations devolved on to them, the ultimate responsibility for compliance with all Project environmental and social requirements resides with Oyu Tolgoi.

Contractor Interface with Oyu Tolgoi Environmental & Community Relations Departments

Within the construction-phase Project Management Team, an "Amalgamation Manager" role has been established.

This role acts as an interface between the Project Management Team and the Oyu Tolgoi Community Relations and Environment Departments, providing information to the Oyu Tolgoi functional departments and enabling those departments to request changes in contractor execution plans due to potential environmental and/or community impacts. This role does not displace responsibilities within other Departments and contractors but complements them.

Key elements of this role are as follows:

- Primary interface/single point of contact between the (construction) Project Management Team and the Oyu Tolgoi Community Relations and Environment departments;
- Provision of timely information regarding scheduled construction activities, principally those "beyond the fence" which have larger potential impacts on the local communities;
- Collect, review, and disseminate information from the Oyu Tolgoi Community Relations and Environment departments (feedback/complaints/comments) regarding construction execution or impacts; and

- Working with the Oyu Tolgoi Community Relations and Environment departments to actively prevent and resolve problems.

The “Amalgamation Manager” function is an integral part of the PMT’s management of Project construction activities. The function will continue to support PMT-managed construction activities that take place after the commencement of Project operations.

Contractor Implementation of the Oyu Tolgoi Management Plans

In addition to having a contractual obligation to implement the measures set out in the existing Oyu Tolgoi EMS, the Project contractors are responsible for implementing any additional measures applicable to the contractor’s scope of work that are identified through the on-going ESIA process (and in respect of any new or supplemental impact assessment documentation).

The following mechanisms ensure that the Project contractors are advised of, and accept responsibility for such measures:

- During ESIA development Oyu Tolgoi implemented a process to review potential environmental and social impacts of the Project and develop impact management and mitigation strategies. Each draft ESIA requirement is assigned to one or more responsible parties, which can include applicable Oyu Tolgoi departments, Oyu Tolgoi principal contractors, all Oyu Tolgoi contractors, and various groups of workers (e.g. Haulage and Earthmoving Contractors and Operators);
- Oyu Tolgoi continues to work with its contractors to keep them apprised of any relevant new EMPs as they are formulated. These requirements are incorporated into the Oyu Tolgoi EMS as they are formalised;
- The Oyu Tolgoi EMPs are appended to the contracts of the construction contractors, once they are formalised; and
- The construction contractor contracts are being updated where necessary to incorporate the Oyu Tolgoi EMS requirements, including the Oyu Tolgoi EMPs.

SMP requirements are either implemented directly by Oyu Tolgoi, or are integrated into contractor activities through the OSBL Amalgamation Manager via the Project Management Contractor.

Competence Training & Awareness

All Oyu Tolgoi employees and contractor staff are required to be appropriately trained and qualified to carry out their duties under the scope of the various Management Systems and the Management Plans. The two aspects of this training are general awareness training and job specific training. Both these aspects are currently incorporated into Construction Phase induction training and job orientation which is structured around safe and environmentally and socially sound job execution.

Operations Phase training and awareness will be based on the requirements set out in the 2012 Oyu Tolgoi HSE MS. Specific, task-relevant training will be provided to all Oyu Tolgoi employees and contractor staff on the Construction-Phase Management Plans.

Environmental and Social Awareness

All Project personnel (Oyu Tolgoi and contractors) receive an induction if their involvement in the Project exceeds either 5 days off-site (for example, working in Ulaanbaatar or Beijing), or if they are required to visit the Oyu Tolgoi site. The Project Induction includes:

- Project description, objectives and stakeholders;
- Occupational Health & Safety;
- Environmental and Social Awareness;
 - Environmental and Social Obligations (roles & responsibilities);
 - Environmental and Social Aspects (legal/other requirements, dust, water quality/quantity, land/wildlife disturbance, loss of native pastoral existence, etc); and
- Communication & Reporting.

Competence

All personnel are required to provide written verification (induction sign-off) that they have completed and understood the Project induction and accept their environmental and social obligation(s).

A completed sign-off is retained by Oyu Tolgoi in an induction sign-off folder which is retained at the site at which the induction was conducted.

Specialised Training

For all work packages or activities involved in the Project, Oyu Tolgoi personnel and contractors (individual or organisational) will be selected on the basis that they are determined to be competent by evaluation of their training, experience, and knowledge etc. Ongoing training and assessment is undertaken for existing Oyu Tolgoi personnel and contractors.

The Oyu Tolgoi Environment Manager determines the requirements (or competencies) for environmental management with regard to both roles and specific activities associated with significant environmental aspects. The Manager – Community Relations determines the requirements (and competencies) for social and community relations management with regard to both roles and specific activities associated with significant socio-economic aspects. These requirements are summarised in Training Matrices, which allows comparison of required competencies (applicable to environmental management and social performance) against identified competencies of Oyu Tolgoi personnel and contractors/consultants.

Detailed topic-specific training requirements are identified in the appropriate Management Plans.

Contractor Training

Oyu Tolgoi provides all staff and contractors with appropriate induction training, job-specific training and ongoing regular toolbox training with regard to Health & Safety, Environment and Community Relations issues. Specific training needs will be identified by Contractors and reported to Oyu Tolgoi. Contractors shall ensure that all staff whose work may create significant health, safety and environmental impacts will receive appropriate training.

1.9 MITIGATION MEASURES AND MANAGEMENT CONTROLS

Mitigation and management controls are identified in each of the Construction Phase Management Plans. Where appropriate, for each identified control the Management Plans provide:

- a description of the activities/facilities to which the control applies;
- a clear description of the measures to be implemented;
- identification of the parties responsible for the implementation of the control measure; and
- a description of the means of verification to ensure that the implementation of the measure can be verified in an auditable manner.

Any necessary actions related to the refinement or further development of mitigation controls are also identified in the Management Plans.⁷

The mitigation measures presented in the Construction Phase Management Plans have been developed to ensure consistency with:

- Specific mitigation and monitoring controls required for impacts identified in the Project ESIA;
- The Project Standards as defined in Section 1.1; and
- Company and Contractor Management Systems (for the Operations Phase Management Plans this will include integration with applicable Rio Tinto Standards and Guidelines).

⁷ In the case of SMPs and the Mine Closure Management Plan this structure is not fully applicable and has been revised to fit the context. The Social Management Plans describe a wide range of activities and actions that are being and will be implemented and for which the mitigation/management controls approach used for Management Plans would not be effective due to the need for increased flexibility to engage with stakeholders and to respond to concerns in a flexible manner. The Mine Closure and Rehabilitation Framework (*Chapter D21*) describes a framework for future actions and is currently under development by the Company.

The mitigation measures to be included in the Operations Phase Management Plans will be developed as described in Section 1.2.4.

1.9.1 Management of Change (MoC)

During project implementation, changes may be required to address foreseen or unforeseen conditions or situations. To provide structure to the process of making Project changes, the existing (construction phase) Oyu Tolgoi Health, Safety, Environment and Security Management System (as utilised by Fluor) incorporates an HSE Management of Change (HSE-MOC) procedure to ensure that during the construction phase, planned or unplanned Project design (and operational) changes that have the potential to result in negative impacts to Health, Safety or the Environment are managed or otherwise mitigated in compliance with the Construction Phase Management Plans. Where such change has the potential to result in negative impacts to health, safety or the environment or departs significantly from the Project Description (see ESIA *Chapter A4: Project Description*, Section 4.2.2), for the purposes of lender notification and approval (if required) the procedures established for the categories identified in *Classification of Change Table 1.2*, and Sections 2.1 through 2.5 the sections below, will apply until the 2012 HSE MS MOC comes into effect.

It is the responsibility of the Project Managers, Engineering Managers, Process Engineering Leads, and HSE Specialists to be familiar with the procedure and apply it to each case. The HSE MOC procedure is required to be used by Oyu Tolgoi personnel within all work areas to define requirements for managing planned and unplanned project changes and to implement these requirements for all applicable cases.

Comprehensive MOC procedures for the operations-phase are under development as part of the integrated 2012 Oyu Tolgoi HSE MS ("2012 MOC Procedure").

The 2012 MOC Procedure will be used to structure the review and approval of changes to the Project including by Oyu Tolgoi senior management and, when required, regulatory authorities and stakeholders such as Project Lenders. The MOC Procedure will be applied to allow environmental and social issues to be addressed as part of any significant changes to Project procedures, processes, design, or activities.

The Management of Change process will apply when changes occur to any of the following activities or items:

- Design, re-design and construction of plant and equipment;
- Design of mines/pits, planning and floor control outside of documented limits;
- Introduction of new or alterations to plant and equipment;
- Materials used, their composition and properties. This includes new chemicals and organisms;
- Feedstock or chemicals added to the process or equipment;
- Drawings and engineered processes;
- The introduction of new operating or maintenance procedures or changes to existing procedures;
- Health, safety or environment equipment, procedures, policies or standards (including emergency response procedures or changes to business resilience and recovery programme);
- Electronic process controller's configurations that are outside the current established limits;
- Organisation structures and responsibilities;
- Personnel changes, training or competency requirements;
- Individual roles and responsibilities;
- Project management hand over to operations;
- Regulatory or statutory limits, licences, permits or agreements;
- Land use zoning or land use management plans; and
- Alteration of environmental and social impacts management and monitoring measures.

Classification of Changes

All changes will be classified depending on the consequences of the change and reporting requirements, as follows:

Table 1.2: Classification of Changes

Impact Category	Impact Description	Action Required
<p>Category 3</p>	<p>Changes which are reasonably likely to result in:</p> <ul style="list-style-type: none"> (i) a significant departure from the Project Description (see ESIA Chapter A4: Project Description, Section 4.2.1) and/or the Project Standards; (ii) new significant environmental and/or social impact(s) not identified in the ESIA; (iii) significant environmental and/or social impact(s) identified in the ESIA in respect of which the mitigation measures in the existing Construction ESMPs are not or are not reasonably likely to be effective; or (iv) material amendment(s) or supplement(s) to the existing Construction ESMPs. 	<p>The Company will notify the Project Lenders of all proposed Category 3 Changes (“Notice of Change”) within a time period to be agreed. The Notice of Change will include the categorization of the Change and the proposed means of implementing the Change. No Category 3 Changes will be implemented without prior Lender approval in relation to the environmental and social matters related to such Change in accordance with procedures to be agreed.</p>
<p>Category 2</p>	<p>Changes which have the potential to or are reasonably likely to result in:</p> <ul style="list-style-type: none"> (i) a departure from the Project Description (see ESIA Chapter A4: Project Description, Section 4.2.1) and/or the Project Standards; (ii) new environmental and/or social impact(s) not identified in the ESIA; or (iii) significant environmental and/or social impact(s) identified in the ESIA but in respect of which no material amendment(s) or supplement(s) to the existing Construction ESMPs are required. 	<p>The Company will notify the Project Lenders of all proposed Category 2 Changes through provision of a Notice of Change within a time period to be agreed.</p> <p>If the Project Lenders consider (acting reasonably) that the Change should be re-categorised as a Category 3 Change, or that the proposed measures for managing or implementing the Change are materially inconsistent with the Project Standards or the Construction ESMPs, the Lenders shall notify the Company within a time period to be agreed (“Lenders’ Notice”). Subject to the Company’s receipt of the Lenders’ Notice within the pre-agreed time period, the Company and the Lenders will make good faith best endeavours to reach a mutually acceptable resolution to the Lenders’ concerns relating to the Notice of Change within a time period to be agreed and the Company will not implement the proposed Change until the parties have agreed that the Change can be made without prior Lenders’ approval in accordance with procedures to be agreed. If the Lenders do not provide a Lenders’ Notice to the Company within the pre-agreed time period, the proposed Change will be deemed to be accepted by the Lenders</p>

Impact Category	Impact Description	Action Required
		and the Company will be entitled to implement the proposed Change in accordance with the Notice of Change.
Category 1	Changes which do not fall within either Category 2 or Category 3.	Notification of the Change(s) to the Project Lenders through annual Project Reporting.

Each change will be provisionally classified by the change originator, taking into account the foreseen effects of the change.

The provisional classification may be changed either to a higher or lower classification during the review/approval process, but any change to the classification requires the agreement of a person in charge of change management (e.g. the “OSBL Manager”).

Based on the risk review process undertaken during the change management, the change will be incorporated into the Management Plan review process. Any changes to activities and/or impacts will be classified in accordance with the criteria listed above and appropriate actions as set out in this procedure will be implemented. Where a material change to the Management Plans is required, external stakeholders, including Project Lenders will be notified, as required.

Oyu Tolgoi will develop a Management of Change procedure for the Operational Phase on equivalent terms to the Management of Change procedure for the Construction Phase as set out above in *Table 1.2* (Classification of Changes) above.

Scope of Changes

Changes may be temporary or permanent, related to Project activities, organisation, personnel, management plans and procedures, equipment, materials, HSE, or community and social issues. Changes may be initiated by:

- Oyu Tolgoi;
- The Project Management Contractor; and
- Contractors or suppliers.

In practice, during the construction phase the MOC process is likely to be initiated by the PMC and raised with the OSBL Manager.

Management of Change Process

Early identification, communication and management of change is the responsibility of all members of the Company and Project.

The MOC process is based on the following key steps:

- Identification of item/situation potentially requiring change (often initiated by PMC);
- PMC requests change through preparation of a document to be submitted to OSBL Manager that:
 - Outlines the nature of the item/situation requiring change;
 - Outlines impacts of the change (e.g., cost, schedule, safety, operability); and
 - Identifies potential biophysical, social, economic, or health concerns.
- OSBL Manager passes on to Environmental and CSP Departments to review the Change for compatibility with the Oyu Tolgoi Management Plans and Management Systems, as applicable:
 - Category 1 changes are agreed between the Environmental and Community Relations Managers and the OSBL Manager (with additional specialist consultation as required);

- Category 2 changes are agreed between the Environmental and Community Relations Managers and the OSBL Manager (with additional specialist consultation as required) and then submitted to the Chief Operating Officer for approval; and
 - Category 3 changes are agreed between the Environmental and Community Relations Managers and the OSBL Manager (with additional consultation as required) and are then submitted for review and approval by the Mongolian Authorities. Once approved, they are then submitted to the Chief Operating Officer for approval.
- Documentation of the approval or rejection of the change request;
 - Review and approval by external stakeholders to the extent required;
 - Compliance with reporting and other obligations in the finance documents;
 - Application for, and receipt of, any approvals required to implement the change under Mongolian law;
 - Implementation of the approved change, including communication to appropriate parties concerning the nature, scope and timing of the change; and
 - Summary of project changes and status to be included in internal compliance reporting and/or in Annual Reports to the Regulatory Authorities and Project Lenders as appropriate.

The results of risk reviews, audits, inspections and analysis of the effectiveness of the Management Plans will be used to identify areas that require change or improvement. Identified weaknesses or shortcomings in the system will be addressed and remedial actions will be applied. Oyu Tolgoi will review the objectives of the Management Plans and will take corrective action where improvements are appropriate. The Management Plan objectives may also be modified over the life of the Project to reflect changing practices, environmental laws, regulations, standards, and technologies. Such amendments or modifications will be subject to the MOC process, including reporting and notification, as required.

Identifying a Change

An MOC request will be developed that includes scope and justification sections. Justifications for changes must be listed on the change notice form, and these may include:

- Change of Scope;
- Legal issues;
- Permitting - A change is required due to National Authority requirements, affecting, for example routing, equipment, construction or design;
- Environment, Health, Safety & Communities - A change potentially affecting the health and safety of persons or the protection of the environment during the construction phase. It may involve safe working limits being exceeded and risk mitigation measures being inappropriate or less effective, leading to the need for repeat risk assessment;
- Functional - Where the facilities cannot function, be operated or maintained without the change;
- Constructability – Where the facilities cannot be fabricated or constructed as designed or specified;
- Statutory – where the change is necessary to comply with legislation or regulatory requirements. The change may be outside the scope of permitted approvals and may require additional notifications and approvals;
- Commercial - Where there is commercial benefit in making the change;
- Schedule – where the schedule may be at risk if the change cannot be accommodated;
- Procurement – Where a supplier cannot meet previous commitments and obligations; and
- Security – Where exposure to security risk is increased or decreased.

Routing of the Change Notice

An MOC request is most likely to be generated during the regular Project risk reviews, but may be generated at any other time. The routing for the MOC will be as follows:

- An MOC request is submitted to the OSBL Manager who will pass on to the Environmental Department and/or the Communities and Social Performance Department;
- The OSBL Manager manages the process and progress of the Change Request through the various stages until approval or rejection;
- In practice the OSBL may co-ordinate with a number of departments within the Company/Project management, for example, for construction:
 - Project Director;
 - Construction Manager;
 - Engineering;
 - Operations;
 - Permitting;
 - Communications;
 - Procurement;
 - Legal;
 - Risk;
 - QA/QC;
 - EH&S; and
 - Human Resources.
- At any stage of the review process, any of the reviewers may reject the basis of the change, but subject to the following requirements:
 - Review and approval time must be minimised;
 - Procedure will be in place for re-submission or required information, etc.;
 - All impacted Management Plans and procedures will be updated to reflect changes approved; and
 - Once approved, the OSBL Manager will notify the PMC.

Decisions regarding the notification method will be based on the three-tiered change categorisation structure described above.

Operations Phase Management of Change

Oyu Tolgoi is developing an operations phase Management of Change (MOC) procedure as part of the 2012 EHS MS. The 2012 MOC Procedure will include comprehensive procedures for the operations-phase as part of the integrated 2012 Oyu Tolgoi HSE MS. The operations phase MOC (2012 MOC Procedure) will encompass environmental and social matters and will apply to all Project activities following the end of the Project construction phase (which is scheduled for December 2012)

The draft operations phase MOC is summarised as follows:

Scope

The procedure will be applicable to all changes to plant, process or systems, including people systems to ensure that they:

- Do not cause harm to people;
- Do not damage the environment or equipment;
- Do not adversely affect processes;
- Do improve work flow; and
- Do benefit the business.

The MOC will apply to a broad range of activities or items that may undergo change, including amendment of the environmental and social impacts, management and monitoring measures set forth in the Project ESIA. Procedures for addressing emergency changes and replacements in kind will also be included.

Roles and Responsibilities

Various Oyu Tolgoi functions will have key roles in the MOC, including the Change Originator, Document Control, various Managers, and designated MOC Custodians.

Procedure

The Procedure itself will comprise the following steps:

- Identifying Change;
- Description of Change;
- Assessment of Proposed Change (including risk assessment);
- Associated Actions of Proposed Change;
- Recording actions and Communication of Change (internal and external where required);
- Implementation of Change;
- Emergency Change requirements; and
- Management of outstanding Change Requests.

1.10 NOTIFICATION OF PROPOSED CHANGE

The following notification procedures apply to proposed changes in both the construction and operations phases of the Project, as applicable.

The Company will notify the Project Lenders of all proposed Category 3 changes (“Notice of Change”). The Notice of Change will include the categorisation of the change and the proposed means of implementing the change. No Category 3 changes will be implemented without prior Lender approval. (A process for Lender review and approval during Project operations will be established in the 2012 MOC Procedure, including procedures for Lender notification and timelines for Lender approval. A diagrammatic representation of the conceptual 2012 MOC Procedure is attached at Annex 3.)

The Company will notify Project Lenders of all proposed Category 2 changes (through provision of a Notice of Change) and if the Project Lenders consider (acting reasonably) that the change will be re-categorised as a Category 3 change, or that the proposed measures for managing or implementing the change are materially inconsistent with the Project Standards or the Management Plans, the Lenders shall notify the Company within 10 working days of receipt by the Lenders of the Notice of Change (“Lenders’ Notice”). The Company and the Lenders will make good faith best endeavours to reach a mutually acceptable resolution to the Lenders’ concerns relating to the Notice of Change within 10 working days of the Company receiving the Lenders’ Notice. The Company will not implement the proposed change until the parties have agreed that the change can be made without prior Lender approval. If the Lenders do not provide a Lenders’ Notice the Company within 10 working days, the proposed change may be implemented in accordance with the Notice of Change. Where the Category 2 change results in material changes to one or more Management Plans, such changes to the Management Plan(s) shall not be made without Lender review and approval. (The details of the process for such Lender review and approval during Project operations will be finalised in the 2012 MOC Procedure.)

1.11 VERIFICATION

Key Performance Indicators

Key Performance Indicators (KPIs) are quantitative or qualitative measurements used to gauge performance over time. They are used to assess the effectiveness of control measures and demonstrate on-going performance during steady state operations. Within the Management Plans specific Project KPIs are identified. KPIs are linked to specific monitoring and audit requirements as follows:

- 100% investigation, reporting and rectification to the satisfaction of Oyu Tolgoi Environment Manager of any environmental incident or accident, irrespective of its source;
- 100% investigation, reporting and rectification of any communities complaint, dispute, incident or grievance irrespective of its source; and
- Compliance with the management and control measures in the Oyu Tolgoi Management Plans as applicable to specific activities.

1.11.1 Verification Monitoring

The Oyu Tolgoi Construction-Phase audit procedure is described in the Oyu Tolgoi EMS (Audit, Monitoring and Measuring procedures) and also applies to the SMS and the HSMS. In summary these comprise Oyu Tolgoi's management system audits, audits of Oyu Tolgoi compliance with the Management Plans, and audits of contractor compliance with the Management Plans. The overall aims of the Oyu Tolgoi audit programme are to:

- Assess the operational elements of the Management Systems operated by the Oyu Tolgoi Project;
- Assess the continued suitability of operational controls operated within the Oyu Tolgoi Project and third-party contract organisations; and
- Verify compliance with international requirements, national legislation and other requirements, as specified in the Construction-Phase Management Plans.

In addition to Oyu Tolgoi-led auditing, contractors are also required to undertake internal audits of their activities. Specific auditing requirements are identified in each Construction-Phase Management Plan. Operations-Phase verification monitoring requirements will be specified in the Operations Phase Management Plans.

Non-Conformance

Non-conformance with Project Standards, Management Plans or Management Systems can be identified from day-to-day activities, periodic audits, inspections and monitoring. HSES non-conformances can be identified, ranked and recorded at four levels.

Once the level of a non-conformance has been established, procedures will be followed based on the actions required for each level as detailed below. Note that a temporary work suspension for cause may be enforced in case of Class IV or III non-conformances. Non-conformances and progress on associated corrective actions are identified, recorded and managed in line with the Oyu Tolgoi Construction-Phase EMS (Non-conformance and Corrective and Preventative Action Procedure, which also applies to the SMS and the HSE MS.)

For the operations phase, this will be further developed in the 2012 HSE MS. The procedure for notification and reporting will be established in the final Non-Conformance Procedure.

Table 1.3: Proposed Classification of Non-conformance

Classification	Description	Action Required
Class IV	A critical non-conformance, materially inconsistent with the Project Standards or Management Plans, resulting in or reasonably likely to result in irreversible impacts to sensitive receptors or important resources or significant damage or irreversible harm or damage to an ecologically or socially sensitive resource or has the potential for an extreme health and safety incident.	<ul style="list-style-type: none"> ▪ Immediate corrective action or site-specific attention required to correct or to stop the on-going non-conformance and mitigate any effects that have occurred, including temporary work suspension where necessary.
Class III	A material non-conformance materially inconsistent with the Project Standards or Management Plans, that has not resulted in clearly identified impacts to sensitive receptors or important resources or material damage or irreversible harm or damage to an ecologically or socially sensitive resource or have the potential for an extreme health and safety	<ul style="list-style-type: none"> ▪ Corrective action or site-specific attention required to correct or to stop the on-going non-conformance and/or to prevent the occurrence of environmental and social impacts. ▪ If potential impacts occur, the Class IV notification and reporting process will

Classification	Description	Action Required
	incident, but it is reasonably likely to have such effects.	apply <ul style="list-style-type: none"> If potential impacts do not occur, the Class II notification and reporting process will apply.
Class II	A material non-conformance with the Project Standards or Management Plans, but not reasonably likely to result in impacts to sensitive receptors or important resources or material damage or irreversible harm or damage to an ecologically or socially sensitive resource or have the potential for an extreme health and safety incident	<ul style="list-style-type: none"> Corrective or preventative action to be taken if required to comply with Project Standards or Management Plans.
Class I	An incident not materially inconsistent with the Project Standards or Management Plans and not reasonably likely to present a threat to the environment, community or worker health and safety.	<ul style="list-style-type: none"> Class I non-conformances (and any actions taken to address them) will be reported in the Project's Annual Monitoring Report.

Operations Phase non-conformance and corrective action requirements will be fully specified in the 2012 Oyu Tolgoi HSE MS. A conceptual Risk Management Matrix is provided in Appendix 2.

1.11.2 Reporting

The timing and content of reporting and notification requirements will be established in the 2012 MOC Procedure and where appropriate, in the activity-specific operations management plans. Oyu Tolgoi will issue summary reports of new material non-compliances where corrective action is required and summarising the resolution status of all prior non-compliance situations and any resulting remedial or corrective action plans, as part of any mandated reporting (e.g., in the Annual Monitoring Report to Project Lenders).

Contractor Verification Requirements

Contractor verification requirements are set out in the Oyu Tolgoi Environmental Management Plan – Contractor Requirements document and are summarised below.

1.12 KEY PERFORMANCE INDICATORS

A series of key performance indicators (KPIs) are established as follows:

Without limiting its obligations under other provisions of its contract, the Contractor shall at all times work to achieve the following Key Performance Indicators:

- no unauthorised Land Disturbance;
- no activity in breach of the provisions of the Investment Agreement, legislation or conditions concerning the environment;
- investigation, reporting and rectification to the satisfaction of the Company Representative of any environmental incident or accident, irrespective of its source; and
- compliance with the management and control measures in the Contractor's Environmental Management Plan.

1.13 AUDIT AND REPORTING

Oyu Tolgoi undertakes regular, periodic HSE audits of Contractor performance. The following procedures are established under contractual agreement with Contractors:

- The Oyu Tolgoi Representative may conduct audits of the Contractor's compliance with its environmental obligations under the Contract, including compliance with the applicable Project Standards;

- The Contractor shall, at its own cost, provide Oyu Tolgoi personnel with all reasonable assistance and access to its operations, personnel and records to enable the Oyu Tolgoi Representative to conduct such audits;
- If, during an audit, the Oyu Tolgoi Representative identifies any non-compliance by the Contractor, the Oyu Tolgoi Representative may issue to the Contractor one or more corrective/preventative action orders which specify the non-compliance, the action required to be taken by the Contractor to remedy the non-compliance and the date or dates by which that action is to be completed;
- The Contractor shall, at its own cost, comply with such orders by the date or dates specified and shall report periodically on its progress and notify the Oyu Tolgoi Representative when the corrective/preventative action has been completed so; and
- The Oyu Tolgoi Representative may conduct follow-up audits to ensure that the Contractor has fully complied with corrective/preventative action orders issued by the Oyu Tolgoi Representative.

In practice this is undertaken by the Subject Matter Experts (SMEs) from the Oyu Tolgoi Environment Department, Health & Safety Department and CSP Department who undertake regular audits (typically every two weeks) in their respective disciplines. Findings where corrective action is required are routed through the OSBL Manager to the PMC.

In addition to auditing of its contractors Oyu Tolgoi also conducts a structured program of routine contractor workplace inspections and internal audits.

The 2012 HSE Management System that is currently in the final stages of development includes the following items as part of Element 16 – Performance assessment and auditing:

- Review / establish performance indicator and metrics;
- Review / establish a process for carrying out HSE interactions and inspections;
- Complete internal auditor training - for conducting audits against HSE management system and Project performance standards;
- Establish schedule for HSEQ MS internal audits and Project performance standard internal audits; and
- Revise and communicate process for external auditing.

External inspection and auditing is also provided by the Independent Environmental and Social Consultant (IESC) appointed in accordance with the IFC Performance Standards. The Project IESC performed two Construction Phase Environmental, Social, Health & Safety Risk Assessments in 2011 (June and December).

1.13.1 Notification and Investigation of HSE and Community Incidents

Contractor Notification Procedures for HSE Incidents

Notification procedures are established in Contractor agreements to ensure that the Contractor immediately investigates all HSE incidents in line with the Oyu Tolgoi Incident Reporting and Investigation Procedure. The Contractor will notify the Oyu Tolgoi Representative in writing of any HSE incident within 24 hours and must promptly give the Oyu Tolgoi Representative copies of any notices, orders or correspondence received from any governmental authorities in relation to the incident or HSE matters generally. The Contractor must not send any notices to governmental authorities without the prior written approval of the Oyu Tolgoi Representative.

Revised Site-Wide Procedures

Revised site-wide procedures applicable to all employees, contractors and visitors have been implemented for the Project⁸. Under these procedures, all employees, contractors and visitors are responsible for reporting all incidents and near miss/hits immediately to work team leaders. In the event of a serious incident, injury or other emergency, it is the responsibility of all employees, contractors and visitors to inform their leader, host or contact the Control Room.

For all HSE incidents, the Oyu Tolgoi Control Room will coordinate the response and trigger notifications to all appropriate work team leaders (for Oyu Tolgoi and the relevant Contractors).

A work team leader is at supervisor level or higher and manages the incident with the support of appropriate Oyu Tolgoi HSE staff. A work team leader is responsible for:

- Reporting all incidents to the Control Room within the current shift;
- Evaluating and determining incident classifications for their work area in consultation with the HSE team;
- Ensuring an investigation and investigation report is completed for incidents in their work area;
- Communicating lessons learnt from incident investigation to workers within their team;
- Ensuring that all incidents have the appropriate actual consequence and maximum reasonable outcome assigned and are reported according to the “escalation procedure”;
- Ensuring incident details are maintained for their work area;
- Verifying the effectiveness of corrective and preventative actions taken prior to closing out incident reports;
- Ensuring planned closure dates for actions are adhered to; and
- Preparing preliminary and final “Red Banners” for significant incidents.

1.13.2 Records and Reporting

Contractor Records and Reporting

In addition to its other record keeping and reporting obligations, the Contractor shall keep the following records and provide to the Oyu Tolgoi Representative typed and signed copies of the following reports:

- weekly environmental report on a designated day including the number and nature of environmental incidents and accidents for the prior seven (7) day period; and
- monthly environmental report including reporting on the number and nature of environmental incidents and accidents for the prior one month period and the status of the Contractor’s EMP. The monthly environmental report shall be provided to the Oyu Tolgoi Representative within three (3) working days of the end of each calendar month.

Company Records and Reporting

In addition to its internal record keeping and reporting obligations, the Company will develop and maintain the following information and, where required, provide to relevant external stakeholders (community, regulatory and financial) the following:

- reports of material incidents or accidents or material non-conformance with the Project Standards or Management Plans, within prescribed timelines, including where applicable, notification immediately upon becoming aware of a fatality or serious injury at the Project site or facilities, whether or not as a result of Company or Contractor action or omission and reporting of any remedial or corrective action taken, proposed to be taken or required to be taken (in accordance with the Proposed Classification of Operations-Phase Non-conformance in *Table 1.3* above);

⁸ Oyu Tolgoi HSE – Incidents and Actions: Roles and Responsibilities. November 2011

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- periodic environmental reporting on Project compliance with the Project Standards and Management Plans, including, as applicable on the number and nature of environmental incidents, accidents and material non-compliance and any remedial or corrective actions taken, proposed to be taken or required to be taken (in accordance with the Proposed Classification of Operations-Phase Non-conformance in *Table 1.3* above) and reporting of any updates regarding such actions;
 - reporting of any remedial or corrective action plans, including estimated timelines for completion, developed to address any material environmental incident or accident, or any material non-compliance with the Project Standards or Management Plans (in accordance with the Proposed Classification of Non-conformance in *Table 1.3* above) and reporting of any updates regarding such actions; and
 - notification and provision of any information required in accordance with the Management of Change process, where applicable, and any required reporting.

Determination of materiality for the purposes of reporting and notification as described above will be based on the Change Matrix being developed by the Company as part of the MOC procedure, and where applicable, the classification of non-conformance in the Conceptual Risk Management Matrix (attached at Annex 2). Timelines for notification and reporting will be developed in the Management of Change Procedure and the Non-conformance Procedure, respectively. The means of notification would be commensurate to the severity of the categorisation.

Annex 1: Oyu Tolgoi Health, Safety and Environmental Policy



HEALTH, SAFETY AND ENVIRONMENTAL POLICY

At Oyu Tolgoi LLC, Health, Safety and Environmental (HSE) responsibilities are integral to the way we operate. Effectively managing HSE issues is an essential component of our business strategy. Through observance and encouragement of this Policy, we are committed to an incident and injury free workplace, adopting leading practices in HSE management, for the benefit of all OT stakeholders.

AIMS:	ACTIONS TO ACHIEVE AIMS:
Ensure exceptional HSE performance and continual improvement of our operations.	<ul style="list-style-type: none"> Establish recognized HSE management systems and encourage implementation of HSE management systems by our suppliers of services and goods. Achieve ISO14001 Certification of our Environmental Management System.
Adhere to the principles of accountability and operational transparency.	<ul style="list-style-type: none"> Comply with all applicable Mongolian laws, company standards and other external accords.
Prevent HSE incidents, injuries, environmental pollution, and promote sustainable development.	<ul style="list-style-type: none"> Identify and mitigate potentially adverse HSE impacts, and provide effective controls for HSE risks. Identify and pursue opportunities to have a positive impact on HSE.
Meet company HSE objectives and targets.	<ul style="list-style-type: none"> Implement activities that will achieve a net positive impact on biodiversity values in the South Gobi. Set and review measurable objectives and targets, and report against these to our stakeholders.
Promote and sustain a positive culture among all our employees and contractors in recognition that ensuring a healthy and safe working environment is one of the primary objectives for the Project.	<ul style="list-style-type: none"> Recognize and reward initiatives that improve HSE performance. Ensure effective resources are made available to complete delivery of HSE improvement plans and to investigate and close out actions from incidents. Plan, appropriately resource and deliver HSE training that will enable all personnel to undertake their work and meet our HSE objectives. Encourage participation of our employees, contractors in activities that contribute to sustainable development.
Use our precious natural resources wisely and manage the bi-products from our activities responsibly.	<ul style="list-style-type: none"> Demonstrate continual improvement of specific targets for resource usage (including water) and ensure all other resources are used wisely. Reduce, reuse and recycle materials to minimize waste and pollution.
Develop long-term, meaningful relationships with our communities and stakeholders so that mining operations leave a positive legacy in the communities and environment in which we operate.	<ul style="list-style-type: none"> Launch sustainable development programs and introduce participatory monitoring with our neighboring communities.



CAMERON McRAE

President and Chief Executive Officer

Annex 2: Conceptual Risk Management Matrix

Risk Management Matrix				
Likelihood	Consequence			
	1 - Very Low	2 - Low	3 – Moderate	4 - High
D - Very Unlikely	Class I (Low)	Class I (Low)	Class II (Moderate)	Class III (High)
C - Unlikely	Class I (Low)	Class II (Moderate)	Class II (Moderate)	Class III (High)
B - Probable	Class II (Moderate)	Class III (High)	Class III (High)	Class IV (Critical)
A - Highly Likely	Class II (Moderate)	Class III (High)	Class IV (Critical)	Class IV (Critical)

Annex 3: Conceptual Management of Change Process

