

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

14.1 INTRODUCTION

14.1.1 This standard provides guidelines and requirements to KUC employees who contemplate using a contractor to provide services for Kennecott. The standard is supported by the Contractor Management System (CMS).

14.1.2 DEFINITIONS

For the purposes of this standard, contractors fall into three categories:

- o **Category 1 contractors** - Individuals engaged on temporary contracts to work within existing operations. These contractors are hired through a Temporary Employment Agency or are consultants. Work is requisitioned directly by the plant and the contractor provides personnel without supervision.
- o **Category 2 contractors** - Companies or individuals engaged for a discrete project which will be carried out in a designated area that is separate from existing operations. These contractors are independent of the facility and are responsible to KUC for carrying out their contracted work safely and in compliance with applicable KUC and regulatory requirements. An example includes (Greenfield Projects) these contracts are for capital projects and are managed by a construction management company with oversight from KUC.
- o **Category 3 contractors** - Companies or individuals engaged under contract to carry out specific tasks or provide specified services within existing operations. Examples of the type of contractor that may fall into this category include:
 - Service Agreements - annual contract agreements with a specific scope of work; e.g. HVAC maintenance, waste oil reclamation, etc. Each plant will have a designated coordinator to manage these contracts.
 - Capital / Plant Requisitioned Work - contracts that are requisitioned directly by plant personnel. The contractor provides direct supervision for the work.

Permit to Work (PTW) – a permit required for Category 3 contractor work. The PTW system ensures that contractors are fully informed and understand the principles of the permit and that the contractor employees have been given the appropriate training and understands their specific responsibilities.

Safety, Health, and Environmental Analysis (SHEA) – an analysis that is prepared by the requestor of contractor services and provided to each contractor with the project bid information. The analysis will enable

Page 1 of 19	Plant: All
PRINTED COPIES ARE UNCONTROLLED	

KUC00011.00

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

the contractor to better address the potential safety, health, and environmental concerns associated with the project to ensure that there is adequate pre-planning.

Safety, Health, and Environmental Action Plan (SHEAP) – an action plan prepared by the contractor to address all issues raised in the Safety, Health, and Environmental Analysis (SHEA).

14.1.3

REQUIREMENTS

14.1.3.1

All Category 1 contractors are to be treated in all aspects of safety, health and environmental as if they were KUC employees. Training considerations must include New Employee Orientation, Plant Safety Orientation, Task Training and Refresher Training, as appropriate. This type of contractor requires a Category 1 Contractor hire form to be entered through ServU. These contractors must go through initial contractor orientation but need not go through the annual renewal process if they have worked all year and received all the KUC required training.

14.1.3.2

All Category 2 contractors must have appropriate safety systems and supervision in place. The contractor's safety duties must be embedded in the contract and audited to see that the contractor carries out its safety duties in accordance with the contract and with applicable KUC and regulatory requirements. A contractor safety representative is required to coordinate the safety program and monitor implementation and compliance.

14.1.3.3

Category 3 contractor's responsibilities vary according to the nature of the work and its location. The KUC Field Supervisor and Contract Administrator must apply the requirements set out in this standard as deemed appropriate.

- For short-term work, the KUC representative who requisitioned the work will review the "Safety, Health and Environmental Analysis and Risk Assessment Pre-job Meeting Checklist" (available on the KUC CMS Intranet website) and ensure site-specific hazard training is provided to the contractor employees prior to entering the property. For long-term work, pre-bid, SHEA, pre-job, SHEAP, and Site Specific Safety Orientation are required. A contractor safety representative may be required if the workforce is large or work is complicated.

14.1.3.4

The following chart is a summary of the types and the requirements that apply.

Page 2 of 19	Plant: All
PRINTED COPIES ARE UNCONTROLLED	

KUC00011.00

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10

Standard: 14.1

Document: KUCSH0027

Rev: 13

REQUIREMENTS	CAT 1	CAT 2	CAT 3	
	Temporary Replacement Personnel	Construction Management Contracts	Service Agreements	Capital / Plant Requisition Work
Approved Contractor		X	X	X
Proof of Insurance		X	X	X
SHEA		X	X	X
Pre-bid Meeting		X	X	X
Pre-job Meeting		X	If emergency or short duration use Safety, Health and Environmental Analysis and Risk Assessment Pre-job Meeting Checklist	
SHEAP		X	X	X
Hazard training / Site Specific Safety Orientation	X	X	X	X
Drug Test	X	X	X	X

14.1.3.5 All Category 2 and 3 contractors shall be safety pre-approved to perform work on KUC property. Safety pre-approval will be based on the contractor's past safety performance, safety program, regulatory record, and insurance company rating. An approval status list of contractor and vendor companies is available on the KUC CMS Intranet website.

- o KUC has chosen to use a third-party to collect the required contractor pre-qualification information. The third party collects and tabulates the required information and provides an online summary report to KUC. The KUC Safety Department reviews the safety pre-approval submission and makes a determination as to the contractor's "Safety Approval" status. Bid submittals will not be considered complete unless all of the requested safety related information is provided.
- o Contractors will also be required to submit to KUC an original signed certificate of insurance for:
 - Statutory Worker's Compensation Insurance for all employees. Such Insurance shall cover claims filed under the Worker's Compensation Law of the State.
 - Employer's Liability Insurance.
 - Comprehensive General Liability Insurance.
 - Comprehensive Automobile Liability Insurance.

Note: Insurance requirements and limit of coverage are available on the KUC CMS Intranet Website

- o For additions to the contractor list, the contractor or KUC representative must contact Rio Tinto Procurement (RTP) for a pre-qualification packet.

14.1.3.6 The Plant Manager may authorize a non-approved contractor for an emergency or a job of short duration, but only when an approved contractor qualified to do the work is not available.

Page 3 of 19	Plant: All
PRINTED COPIES ARE UNCONTROLLED	

KUC00011.00

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

- The KUC Field Supervisor or Contract Administrator in all such instances shall hold a Pre-job meeting. (The Safety, Health and Environmental Analysis Pre-job Meeting Checklist is available on the KUC CMS Intranet Website) The contractor representative must sign the Pre-job meeting form and review all information presented with all employees working on the job.
- 14.1.3.7 The requestor of contractor services must prepare a Safety, Health, and Environmental Analysis (SHEA) for each proposed project. (Exhibit 14.1.1) The KUC Safety and / or Environmental representative should approve the analysis prior to distribution to the contractor.
- 14.1.3.8 A pre-bid communication meeting will be held with all prospective bidders to discuss the scope and requirements of the project as needed. Safety, health, and environmental requirements identified in the SHEA will be included as part of the meeting agenda. The bid assessment must include consideration of the contractor's safety plan and ability to implement the plan. Safety considerations shall receive no less weight than other considerations such as costs and technical capabilities.
- 14.1.3.9 The contractor must prepare a site specific Safety, Health, and Environmental Action Plan (SHEAP). KUC Safety and Environmental representatives must approve the SHEAP before work will be allowed to proceed. If scope changes are made in a project, no associated work will proceed until all appropriate changes or amendments are made to the plan and the revised plan is approved and communicated to all affected parties.
 - For emergency jobs or short duration job with a low degree of hazard, the completion of Safety, Health, and Environmental Analysis Pre-job Meeting Checklist may serve as a SHEAP.
- 14.1.3.10 Pre-job safety meetings are required for all contractors entering company property regardless of the job or time span involved. The KUC Field Supervisor or Contract Administrator will schedule and conduct the pre-job conference using the Safety, Health and Environmental Analysis Pre-job Meeting Checklist.
- 14.1.3.11 The contractor must complete a Contractor Control Sheet (available on the CMS KUC Intranet Website) verifying that; within the last twelve (12) months:
 - The contractor has performed all required regulatory medical examinations, and substance abuse tests and that these documents will be on-site for verification.

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

- That each employee listed on the sheet has, where required, received a respirator fit test, and all other MSHA / OSHA training, as appropriate. Documentation of this training must be available for verification.

The completed Contractor Control Sheet will be required before the contractor employees are scheduled for Contractor Orientation Training and receive a KUC gate pass. The Contractor Coordinator is responsible to schedule the orientation. Completed paperwork must be submitted when scheduling the contractor for Orientation (See SOP CMSSOP10018 Contractor Orientation Training). The information will be used to create a personnel record ID # for the contractor employee and subsequently store pertinent safety training records for that contractor employee. If the scheduled KUC orientation training class is not used, an Exception form must be signed by the plant Manager / GM or designee, and the form must be sent the Admin Assistant with the completed Control Sheets. Exception forms and a detailed process flow map are available on the KUC CMS Intranet Website.

- 14.1.3.12 Where contractors are working in OSHA regulated areas (designated areas in the Smelter and Refinery) there must be a provision for medical surveillance and a written Compliance Plan (See OSHA Standards CFR 1910.1018 and 1910.1025). The Plan must
- Establish a written program that includes engineering controls to reduce exposures.
 - Contain monitoring data.
 - Be updated at least every 6 months.
- 14.1.3.13 A **Permit to Work** (PTW) is required for contractor work. (See Exhibit 14.1.2 or Exhibit 14.1.3 for Underground Mining).
- The PTW must:
 - (a) Set out the work to be done, identify the hazards and the required safe work procedures.
 - (b) Be reviewed every shift and reissued if a change in conditions or work scope has occurred.
 - (c) Be signed by a designated manager for the current shift who is the person with responsibility for the geographical area or for the task to be completed.

Contractor that may fall under a Permit to Work exemption must be properly identified through a risk assessment analysis of the tasks they perform.

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

- 14.1.3.14 Each department shall identify and train individuals "Qualified Persons" that are authorized to issue a Permit to Work. Authorization shall be valid for a maximum period of one (1) year after which refresher training and re-authorization shall take place. The "Qualified Person" will:
- Understand the scope of work and facilitate a dialogue to make clear to the person(s) carrying out the job, the hazards and risks involved and precautions to be taken to control the hazards; and minimize their risks.
 - Make sure that the necessary pre-cautions are implemented, including isolations, before work begins.
 - Ensure all people who may be affected by the work are informed before the work begins, when the work is suspended, and when the work is complete.
 - Ensure effective arrangements are made for the worksite to be examined before work begins, on completion of work, and as appropriate when work is suspended.
 - Ensure communications are made to discuss all ongoing or suspended permits with the oncoming permit issuer and all changing conditions or process changes that present a known hazard are communicated.
- 14.1.3.15 Each facility shall develop an audit process to ensure the Permit to Work system is functioning effectively.
- 14.1.3.16 All individuals working within the Permit to Work system will ensure that:
- They do not start any work requiring a permit, until it has been properly authorized, issued, and the necessary precautions have been taken.
 - They have received instruction and have a good understanding of the permit system at the workplace where the work is occurring.
 - They do not start any work they suspect requires a permit, until it has been properly authorized and issued or confirmation received that a permit is not required for the planned scope of work.
 - They receive a briefing from the Qualified Person on the particular task and they understand the hazards and the precautions to be undertaken.
- 14.1.3.17 **SERVICE VENDORS / SUPPLIERS** - The following applies to those entering company property that do not fit the definitions of Category 1, 2 or 3 contractors as described in 4.1.2 and are not considered visitors as described in KUC Safety and Health Standard 12.1 Visitor's Policy. This group includes individuals who pickup or deliver materials, short term

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

service workers, employees of equipment manufactures, or fields or sales representatives all generally referred to as "service vendors or suppliers".

14.1.3.18 All service vendor and supplier companies that send employees to KUC properties are responsible for the following:

- Employees comply with all KUC Hazard and site specific training requirements provided.
- Employees are in compliance with all regulatory training requirements for the service they are to provide and have received all required and appropriate skills training for any task that they are performing. If the specific job assignment is for frequent or extended periods, and potential exposure to hazards, comprehensive training is required that meet all KUC and regulatory requirements
- Documentation of all training is available and shall be provided as requested by KUC.
- Employees comply with all applicable regulatory standards related to the tasks they are performing.
- All employees are competent to understand instructions or warnings in English; bring to the attention of others unsafe conditions or actions; and give adequate verbal warnings of unsafe conditions or actions (unless granted an exception as identified in 14.1.5.4).
- Emergency contact information for each employee entering KUC property is maintained and readily available

14.1.3.19 KUC is responsible for the following regarding service vendors and supplier company employees:

- The KUC Security Officer or designated KUC representative at each plant must provide service vendors or suppliers Plant Hazard Training and issue each person a "Hazard Training" card, which is valid for 12 months. In the event the service vendor or supplier cannot produce the receipt for hazard training, or if training is more than 12 months old, the service vendor or supplier will be required to complete the training and receive a new card.
- Security Officers or a designated KUC representative must visually check and ensure that service vendors or suppliers are properly equipped with personal protective safety equipment.
- Employees who are on the site in a service or maintenance capacity must be given training in accordance with their exposure to hazards. If the specific job will not entail exposure to hazards at the facility, they need only be given hazard training. The designated KUC representative must ensure that all required site specific training is identified and provided i.e. site specific driver's license, Process

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

Safety Management (OSHA PSM), respirator requirements etc.

- 14.1.3.20 **Delivery Persons** – (Individuals who are briefly on property to pick up or deliver materials) The extent of delivery persons' exposure to facility hazards varies. Comprehensive training is not required if there is no exposure to facility hazards. Delivery persons must receive hazard training commensurate to their exposure to hazards. In addition, they must be trained in the health and safety aspects and safe operating procedures of any machinery or equipment that they are required or allowed to operate while on mine property. (See KUC Delivery Driver Unloading Standard 14.4)

14.1.4 **RESPONSIBILITIES**

- 14.1.4.1 Rio Tinto Procurement (RTP) is responsible for contracting for services on behalf of KUC. RTP is responsible for:
- Soliciting bids only from contractors on the KUC Approved Bidder List.
 - Compiling a contract with general and special terms and conditions. RTP will ensure that the contractor's safety duties are embedded in the contract. The contract document must contain provisions covering safety including:
 - Contractor responsibility to comply with the KUC safety policy, rules and procedures, and all applicable laws.
 - Proof of adequate levels of insurance.
 - Indemnification agreement and termination clause or penalties for lack of performance in safety.
- 14.1.4.2 KUC is responsible for the day-to-day management of the contractor and the administration of the contract. The KUC service requestor (person who identifies the need for contractor services and who has the authority to request the services of a contractor) is responsible for:
- Preparing a scope of work including a Safety, Health, and Environmental Analysis (SHEA).
- 14.1.4.3 The KUC Plant Manager is accountable for:
- Authorizing a non-approved contractor for an emergency or a job of very short duration when an approved contractor qualified to do the work is not available.
 - The Permit to Work system and implementation within their own facility. The Plant Manager will ensure that:
 - All personnel who operate or use the PTW are trained and competent to do so.

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

- An audit process is in place to ensure the system is functioning effectively.

- 14.1.4.4 The KUC Field Supervisor is the on-site manager who is responsible for ensuring the effectiveness of the contractor safety management system in relation to the contract. The KUC Field Supervisor is responsible for:
- o Ensuring that the contractor employs an audit process that will ensure that the contractor carries out all safety duties in accordance with the contract and with applicable regulatory requirements.
 - o Ensuring that, where practical, the work area is clearly demarcated.
 - o Ensuring a Permit to Work system is implemented
 - Ensuring that the permit is available for inspection at the workplace.
 - Monitoring the work to check compliance with the permit conditions.
 - o Reporting and recording all contractor safety incidents, accidents, injuries and near miss incidents.
 - A copy of the contractor's accident investigation report must be submitted by the end of the shift.
 - o Reviewing the contractor's accident investigation report and completing a follow-up investigation. A copy of the completed accident investigation must be sent to the KUC Safety Department.
 - o Providing total man-hours worked for each contractor under his / her jurisdiction to the KUC Safety Department by the last day of each month.
 - o Communicating when required between KUC and a contractor during a project. The KUC Field Supervisor or designee will be the single person responsible for the communications. All other affected KUC personnel must be made fully aware of any issue. When contractors are working closely (same area or nearby, same equipment or nearby) with KUC employees, the contractor Safety, Health, and Environmental Action Plan (SHEAP) will be discussed in detail with the KUC area supervisors.

- 14.1.4.5 The KUC Contract Administrator is responsible for the daily administration of the contract including:
- o Compliance and implementation of the CMS requirements.
 - o Ensuring compliance with the KUC Management of Change requirements when appropriate. (See KUC Safety and Health Standard 14.3)
 - o Monitoring the activities of the contractor, and completing formal reviews with the contractor that includes safety performance, and

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

capturing and acting on safety improvement ideas. Action plans will be agreed and documented to correct noted deficiencies.

- Ensuring that the Permit to Work is implemented.
- Ensuring that Contractor employees have been given the appropriate Permit to Work training.

14.1.4.6 The contractor is responsible for running a safe job-site and for compliance with all provisions of this standard. The contractor is responsible for:

- Preparing a Safety, Health, and Environmental Action Plan (SHEAP) addressing all issues identified in the Safety, Health, and Environmental Analysis (SHEA).
- Require each employee to prepare a Personal Health and Safety Plan.
- Completing a Contractor Control Sheet for all employees that will be performing work on KUC property.
- Conducting job specific training prior to beginning work that will include a review of the SHEAP and pre-job checklist. Verification that the training has been completed must be provided to the Contract Administrator.
- Reporting immediately all accidents / injuries to the appropriate plant Communications / Control Center and to the KUC Field Supervisor, completing an accident investigation report and submitting a copy by the end of the shift.
- Providing verification of a Drug Policy.
- Confirming that all tools and equipment to be used are in a safe condition.
- Providing to the KUC Field Supervisor the following documentation as required:
 - Accident and injury investigation reports summaries and follow-up.
 - General inspection reports.
 - Outside agency inspection reports.
 - Records of safety meetings.
- Fully implementing the requirements of the Permit to Work System and ensuring that all employees receive and understand the Permit to Work training.
 - Permit precautions are maintained throughout the work activity so that the worker understands that if circumstances change, work must be stopped and advice sought.
 - The workgroup stays within limitations set on the permit (physical boundaries, type of work, and duration of permit).
 - On completion or suspension of work, the site is left in a safe condition and the "Qualified Person" is informed.

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

14.1.5 **TRAINING**

14.1.5.1 Before work begins on any contract, all contractor personnel must be given appropriate orientation and induction training including emergency procedure drills, and attend all required hazard training and site-specific orientation and training.

14.1.5.2 All contractor companies must assure KUC that they are in compliance with all regulatory training requirements for each worker by certifying that the training has been completed and that the required documentation is available upon demand

14.1.5.3 **English Language Requirements** – All Contractor employees must be able to read and speak the English language sufficiently to allow them to:

- o Understand and comply with verbal and / or written safety requirements and instructions, and warning signs and labels;
- o Understand and be capable of executing emergency notification and emergency management procedures;
- o Bring to the attention of English speaking employees any unsafe conditions or actions; and
- o Participate in and understand pre-task risk assessments and effectively participate in a KUC Quality Safety Interaction (explain in English the work they are performing; the risks associated with the tasks; and how those risks are being controlled).

14.1.5.4 **Exemption to English Language Requirement** – Non-English speaking (NES) Contractors may be allowed to perform work at KUC if they receive an exemption in accordance with the requirements of this paragraph. Exemptions may be requested when English speaking workers with the required skill set are not available through normal channels and the use of non-English speaking workers will not compromise HSE requirements.

NES exemption request - The KUC Contract Administrator is responsible for requesting the exemption by completing a KUC Level 1 on-line Risk Assessment including all HSE aspects (i.e. number of people involved, number of bi-lingual employees required, exposures, safety controls etc.)

o The NES exemption request must include the following:

- Date / Plant / Location / Scope of Work
- Name of Contracting Company
- Name of NES Contractor/s
- Relevant language
- Proposed date / duration of tasks

Page 11 of 19	Plant: All
PRINTED COPIES ARE UNCONTROLLED	

KUC00011.00

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10	Standard: 14.1	Document: KUCSH0027	Rev: 13
--------------------------	----------------	---------------------	---------

- Verification of Minimum NES Safety Controls (attach documentation)
- Risk Assessment (Level 1)

Minimum Non English Speaking (NES) Safety Controls. As a minimum, the following NES safety controls must be applied to any NES Contractor working at KUC.

- o Training - The contractor must provide training to the NES contractor in the relevant non-English language including:
 - KUC Orientation information and all plant and task specific KUC and / or regulatory training.
 - Validation of participant's knowledge will be demonstrated by achieving passing score on required test.
 - Documentation to verify training must be available.
- o Bi-lingual contractor employees - There will be an adequate number of bi-lingual contractor employees assigned with the non English speaking workers at all times, also bi-lingual HSE representatives may be a required full-time position depending on the job scope and Risk Assessment.
- o The exemption must be:
 - Completed and signed by the KUC Contract Administrator;
 - Reviewed and signed by a Plant Safety Advisor;
 - Reviewed and approved by the Plant GM/M.

14.1.6 **RECORDKEEPING**

14.1.6.1 The KUC Contract Administrator will maintain copies of Pre-bid / Pre-job conferences, SHEAs, SHEAPs, audits, and accident investigation reports.

14.1.6.2 The contractor is responsible for maintaining all required regulatory records including hazard training, site-specific orientation, emergency procedure drills, all required medical examinations, substance abuse tests, respirator fit test, and all other MSHA / OSHA training, as appropriate.

14.1.6.3 The completed Permit to Work must remain at the job site until the work is completed and then forwarded to the facility record storage center / location where they are to remain on file for 2 years.

REFERENCES:

KUC Safety and Health Standard 12.1 Visitors Policy
 KUC Safety and Health Standard 14.3 Management of Change
 KUC Safety and Health Standard 14.4 Delivery Driver
 KUC Safety and Health Standard 16.2 Confined Space Entry

Page 12 of 19	Plant: All
PRINTED COPIES ARE UNCONTROLLED	

KUC00011.00

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10

Standard: 14.1

Document: KUCSH0027

Rev: 13

KUC Safety and Health Standard 16.4 Cranes and Hoists
 KUC Safety and Health Standard 16.5 Aerial Lifts and Platforms
 KUC Safety and Health Standard 16.7 Scaffolds
 KUC Safety and Health Standard 16.12 Isolation
 KUC Safety and Health Standard 16.20 Fall Protection,
 OSHA Standards CFR 1910.1018 and 1910.1025
 HSEQ MS Element 7 Supplier and Contractor Management
 KUC Contractor Management System (CMS) – Located on the KUC Intranet Website
 KUC SOP CMSSOP10018 Contractor Orientation Training

REVISION HISTORY:

MOC#	Description of Change	Prepared By	Date
TS00125	Add Exhibit 14.1.6 Underground Mining Permit to Work; add 14.1.6 Service Vendors / Suppliers; Update Contractor Control Sheet to include SAP required information	Safety and Health Standards Committee	07 / 2007
T10012	Changes submitted as the result of a Contractor Orientation Six Sigma project review and update, Contractor Safety Improvement Project - English Language Requirements, and a review of the Permit to Work requirements. Transferred insurance limits, Pre-job Checklist and Contractor Control forms to KUC CMS online website. Updated format and Document number added.	Safety and Health Standards Committee	08 / 2009
10919	Revised Permit to Work to define when an area inspection is required.	Safety and Health Standards Committee	11/2009
13221	Revised Permit to Work to improve clarity and intent. The key message is that no <u>work may start</u> until the items checked on the permit are completed.	Safety and Health Standards Committee	08/2010

SAFETY AND HEALTH STANDARDS

Contract of Service, Repair and Construction Work

Effective Date: 09/30/10

Standard: 14.1

Document: KUCSH0027

Rev: 13

Exhibit 14.1.1

KENNECOTT UTAH COPPER SAFETY, HEALTH & ENVIRONMENTAL ANALYSIS (SHEA) OUTLINE

(Contractor is responsible to address each item identified in a Safety, Health, and Environmental Action Plan - SHEAP.)

Project Title And Scope Of Work	Description of Project including the equipment to be used.
Job Hazard Analysis (Risk Assessment) and Required Compliance	A summary of each phase of the project or area of work identifying all potential hazards, including safety, health and environmental.
Management Of Change	Review Safety and Health Standard 14.3.
Air Pollution	Description of known air pollution problems and monitoring requirements.
Water Pollution	Description of known water pollution and monitoring requirements.
SPCC	Description of SPCC Plan (i.e., spill containment).
Solid Waste Management	Description of known solid waste management issues (i.e., where material will be stored, removal of spent containers and unused product).
Hazardous Waste Management	Description of any known hazardous waste issues and acceptable disposal techniques.
Remediation	Description of plans to address contamination of soils.
Medical Surveillance	Requirements, if any; (i.e. physicals, respirator use, medical certification, blood/urine tests).
Training	Training required such as safety orientations, task training, hazard training, regulatory required, ISO General Awareness etc.
Fire Protection	Type required for this project.
Safety Hazards	Description of known hazards such as high work, crane use, confined space etc.
Safety Meetings	Type and schedule of meetings.
Personal Protection	Description of required protection and special equipment.
Inspection Procedures	How and by whom the project will be inspected and monitored.
Standards	Description of which standards apply to Project; i.e., UOSH, MSHA, EPA, etc. Also, description of which KUC/Rio Tinto and site specific standards apply to the project.
Testing & Permits	Description of required testing and permits (i.e., Confined Space, Hot Work, Permit to Work, etc.).
Recordkeeping	Description of logs, reports, photographs, training records etc. required for this project.
Other	Anything not covered above.

KENNECOTT UTAH COPPER PERMIT TO WORK (Standard 14.1)

Originated By: (Print Name Below)	Qualified Person: (Print Name Below)	Qualified Person: (Signature Below)	Date and Time Issued:	AM PM
Equipment Number / Description:		Work Area / Specific Location:		
Lockout Box / Board:		Work Order / PO Number:		
Work Description:				
Contractor Name and Phone #:		Contractor Supervisor:		

PRE-JOB REVIEW		
1. Has a visual inspection of the worksite been performed by a Qualified Person and the contractor or designated KUC maintenance personnel? NOTE: A visual inspection may be omitted based on the judgment of the Qualified Person if: - There is a formal risk assessment which shows that a visual inspection is not necessary, or - An initial visual worksite inspection was conducted with the personnel performing the work and the Qualified Person, there have been no significant changes in the worksite, and the job is routine or repetitive in nature.	<input type="checkbox"/> Yes	Not Required <input type="checkbox"/>
2. Has a conversation taken place about the hazards associated with the work prior to starting the work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Did the Qualified Person and contractor personnel review the TRACK CARD prior to beginning the work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4. Should a safety, health, and / or environmental representative be involved in this work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If items 2 or 3 are marked "No" do not proceed with the work. Consult the appropriate Area Supervisor.

EMERGENCY NUMBERS (All incidents must be reported through the Plant emergency notification system)							
<input type="checkbox"/> Mine 569-6211	<input type="checkbox"/> Copperton 569-6911	<input type="checkbox"/> Smelter 569-6499	<input type="checkbox"/> Refinery / MAP 569-6722	<input type="checkbox"/> Power Plant 569-6622	<input type="checkbox"/> Tailings 569-7911		

AREA – Check those that apply (Required to be completed before works begins)				
Equipment Condition	Pressurization	Isolation	Electric Power	Preparation
<input type="checkbox"/> In service	<input type="checkbox"/> Pressurized	<input type="checkbox"/> Lock and Tag	<input type="checkbox"/> Breaker Locked Out	<input type="checkbox"/> Water Washed
<input type="checkbox"/> Out of Service	<input type="checkbox"/> Bleeds Open	<input type="checkbox"/> Block / Blind	<input type="checkbox"/> Fuses Removed	<input type="checkbox"/> N ₂ Purged
<input type="checkbox"/> Product in Line	<input type="checkbox"/> Vented	<input type="checkbox"/> Valved	<input type="checkbox"/> Grounded	<input type="checkbox"/> Steam Purged
<input type="checkbox"/> Drained	<input type="checkbox"/> Ventilation Required	<input type="checkbox"/> Other	<input type="checkbox"/> Other	<input type="checkbox"/> No Purge Required
<input type="checkbox"/> Other:	<input type="checkbox"/> Other or non applicable	<input type="checkbox"/> Not Required	<input type="checkbox"/> Not Required	<input type="checkbox"/> Other:

POSSIBLE HAZARDS and PRECAUTIONS (Required precautions must be reviewed with workers before work begins)				
<input type="checkbox"/> Hot Surfaces / Burns	<input type="checkbox"/> Carbon Dioxide	<input type="checkbox"/> Oxygen Depletion	<input type="checkbox"/> Barricade Area	
<input type="checkbox"/> Toxic gases	<input type="checkbox"/> Hydrogen Sulfide Gas	<input type="checkbox"/> Oxygen Enrichment	<input type="checkbox"/> Proper Warning Signage	
<input type="checkbox"/> Caustics	<input type="checkbox"/> Sulfur Dioxide Gas	<input type="checkbox"/> Radiation Device	<input type="checkbox"/> Fire Protection	
<input type="checkbox"/> Acid	<input type="checkbox"/> Sulfur Trioxide Gas	<input type="checkbox"/> Pinch Points	<input type="checkbox"/> GFCI	
<input type="checkbox"/> Regulated Process Dust	<input type="checkbox"/> Arsine Gas	<input type="checkbox"/> Avoid Skin Contact	<input type="checkbox"/> Arc Flash / Shock / Electrocutation	
<input type="checkbox"/> Trips / Falls/Slippery Surfaces	<input type="checkbox"/> Carbon Monoxide	<input type="checkbox"/> Steam	<input type="checkbox"/> Blasting	
<input type="checkbox"/> Haul Roads Kress / Mine	<input type="checkbox"/> Ammonia Gas	<input type="checkbox"/> Access Road Condition	<input type="checkbox"/> High Voltage Trail Cable	

Other known potential hazards not identified above: (describe)

REQUIRED PERMITS (To be completed before work begins)				
<input type="checkbox"/> Confined Space	<input type="checkbox"/> Excavation	<input type="checkbox"/> Hot Work	<input type="checkbox"/> Personnel Hoisting	
<input type="checkbox"/> Working at Heights	<input type="checkbox"/> Close Proximity	<input type="checkbox"/> Fire Protection Impairment	<input type="checkbox"/> Jumper	
<input type="checkbox"/> Scaffold	<input type="checkbox"/> Crane Critical Lift	<input type="checkbox"/> Line Break	<input type="checkbox"/> Permit to Unload	

ADDITIONAL PERSONAL PROTECTION EQUIPMENT REQUIREMENTS				
<input type="checkbox"/> Chemical Resistant Clothing	<input type="checkbox"/> Heat Resistant Clothing	<input type="checkbox"/> Gloves	<input type="checkbox"/> Fall Protection	
<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Goggles / Face Shields	<input type="checkbox"/> Respirator	<input type="checkbox"/> Coveralls, Sleeves / Hoods	
<input type="checkbox"/> Other:				

WORKER REVIEW and ACCEPTANCE - I have been instructed as to the conditions of this permit and I am adequately trained to perform this work.		
Print Name	Signature	Date
1		
2		
3		
4		
5		

Note: If additional space is required for authorized personnel, an additional roster sheet may be attached to the permit.

SHIFT CHANGE INSPECTION/ACCEPTANCE - Work conditions are at the date and time of issue. Contractor personnel must verify the conditions and apply designated safeguards for their own protection. KUC shall monitor the work site on a regular basis. If the permit extends to the next shift, it must be reevaluated at the work site for accuracy at the beginning of each shift. This permit is **void** if work or scope conditions change.

Date	Shift	Time	Any Change in Conditions or Work Scope? ⁽¹⁾	Checklist	Contractor Acceptance (Print Name and Sign)	KUC Acceptance (Print Name and Sign)
		AM		<input type="checkbox"/> Area Demarcated <input type="checkbox"/> Permit Posted <input type="checkbox"/> Permit Compliance <input type="checkbox"/> No Incidents <input type="checkbox"/> Safety Improvements		
		PM				
		AM		<input type="checkbox"/> Area Demarcated <input type="checkbox"/> Permit Posted		

			PM	<input type="checkbox"/> Permit Compliance <input type="checkbox"/> No Incidents <input type="checkbox"/> Safety Improvements		
WORK COMPLETION or CANCELLATION						
Completion or Cancellation Date:					Completion or Cancellation Time:	
					AM PM	
If cancelled, provide reason:						
<i>Contractor Acceptance Signature:</i>						
<i>Qualified Person Acceptance Signature:</i>						

(Back of Permit)

Permit will be posted at work site until work is complete or a new permit is issued. This permit must be reviewed every shift or if a change in conditions or work scope has occurred. Expired permit must be sent to the Contract Administrator. The maximum duration of the permit is 24 hours.

If changes in conditions or work scope exist, then a permit must be reissued. A modified **SHEAP** and **Management of Change** may be applicable.

The purpose of the Permit to Work System is to:

- Provide for the proper authorization of contractor work and the identification of responsible personnel.
- Provide for a dialogue between the Qualified Person and contractor to make clear to the person(s) carrying out the job the hazards and risks involved and precautions to be taken to control the hazards and minimize risks.
- Ensure that the person responsible for an area of the facility is aware of all work being undertaken in their workplace.
- Assure that the equipment or system has been properly prepared for the corresponding task.
- Assure that operating personnel understand when the work is complete, the extent and effect of repairs, and that the repair is acceptable and safe for operation.

The Qualified Person who issues the permit will:

- Understand the scope of work and facilitate a dialogue to make clear to the person(s) carrying out the job, the hazards and risks involved and precautions to be taken to control the hazards and minimize their risks.
- Conduct a visual inspection of the work site with the contractor personnel unless there is a formal risk assessment in place which shows that a visual inspection is not necessary, or if an initial visual worksite inspection was conducted with the personnel performing the work and the Qualified Person, there have been no significant changes in the worksite, and the job is routine or repetitive in nature.
- Stress the requirement that the necessary precautions need to be implemented, including isolations, before the work begins.
- Be trained and properly listed as a Qualified Person.
- Ensure all people who may be affected by the work are informed before the work begins, when the work is suspended and when the work is complete.
- Ensure effective arrangements are made for the worksite to be examined on completion of work and as appropriate when work is suspended.
- Ensure that communications are made to discuss all ongoing or suspended permits with the oncoming permit issuer.

Contractor Supervisors will ensure that:

- They have received training in the Permit to Work System and the people working for them have received adequate instruction on the system.
- Permit precautions are maintained throughout the work activity so that the worker understands that if circumstances change work must be stopped and advice sought.
- The workgroup stays within limitations set on the permit (physical boundaries, type of work and duration of permit).

Individuals working within the permit to Work System will ensure that:

- They do not start any work requiring a permit, until it has been properly authorized and issued.
- They have received instruction and have a good understanding of the permit to Work System at the workplace where the work is occurring.
- They do not start any work they suspect requires a permit, until it has been properly authorized and issued or confirmation gained that a permit is not required for the planned scope of work.
- They receive a briefing from the Qualified Person on the particular task and they understand the hazards and the precautions to be undertaken.
- On completion or suspension of work the site is left in a safe condition and the Qualified Person is informed.

Page 17 of 19	Plant: All
PRINTED COPIES ARE UNCONTROLLED	

KUC00011.00

Exhibit 14.1.3

Underground Mining Permit to Work Standard 14.1



Rev. 1 07/07

Contractor Company Name: _____

Contractor Supervisor: _____

Work Location: _____

Work Description: _____

*Contractor Personnel must verify the conditions and apply designated safeguards for their own protection.
KUC Personnel shall monitor and evaluate the job site on a regular basis.*

PRIOR TO BEGINNING WORK, THE FOLLOWING MUST BE REVIEWED AND MET

HAZARD RECOGNITION	SITE SPECIFIC ORIENTATION	TRACK PROGRAM/RISK ASSESSMENT
<input type="checkbox"/> Contractor has been informed of the potential hazards associated with their work. COMPLETED: YES NO	<input type="checkbox"/> - Contractor has been oriented to the specific project or work area including evacuation and vehicle driving requirements. COMPLETED: YES NO	<input type="checkbox"/> -TRACK Program and / or risk assessments associated with this work reviewed with contractor and JHA's completed. COMPLETED: YES NO
PERSONAL PROTECTIVE EQUIPMENT	SAFETY STANDARDS REVIEW	REQUIRED PERMITS
<input type="checkbox"/> Hardhat <input type="checkbox"/> Safety Glasses with Sideshields <input type="checkbox"/> Metatarsal Boots <input type="checkbox"/> Hearing Protection <input type="checkbox"/> Gloves <input type="checkbox"/> Respirator <input type="checkbox"/> Self Rescuer <input type="checkbox"/> Fall Protection <input type="checkbox"/> Face Shield <input type="checkbox"/> Mine Lights <input type="checkbox"/> Other: _____ CHECK ALL THAT APPLY	Contractor has been informed of the following KUCC standards relevant to the work being performed <input type="checkbox"/> Emergency Response Plan <input type="checkbox"/> Working at Heights <input type="checkbox"/> Mobile Equipment <input type="checkbox"/> Confined Spaces <input type="checkbox"/> Isolation and Lockout <input type="checkbox"/> Hot Work <input type="checkbox"/> Electrical Safety <input type="checkbox"/> Underground Mine Standards <input type="checkbox"/> Hazardous Chemicals <input type="checkbox"/> Ground Control Requirements <input type="checkbox"/> Ventilation Plan <input type="checkbox"/> Other: _____ CHECK ALL THAT APPLY	<input type="checkbox"/> Confined Space <input type="checkbox"/> Hot Work <input type="checkbox"/> Working at Height <input type="checkbox"/> Scaffold <input type="checkbox"/> Line Break <input type="checkbox"/> Personnel Hoisting <input type="checkbox"/> Excavation <input type="checkbox"/> Close Proximity <input type="checkbox"/> Other: _____ CHECK ALL THAT APPLY
LIST ADDITIONAL IDENTIFIED HAZARDS	LIST ADDITIONAL REQUIRED SAFE WORK PROCEDURES	

Job Site is prepared to turn over to Contractor? YES NO Not Applicable

Permit to be Renewed Each Shift Each 24 Hours *This permit is always subject to termination if location, scope of work, or conditions change.*

Permit Start Date: _____ Time: _____ Expected Permit End Date: _____ Time: _____

CONTRACTOR VERIFYING AND ACCEPTING PERMIT

Name:	Signature:	Date:	Time:
-------	------------	-------	-------

KUC UNDERGROUND QUALIFIED PERSON AUTHORIZING PERMIT

Name:	Signature:	Date:	Time:
-------	------------	-------	-------

