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**Kaius Resources**

**Standard Operating Procedure – Radio Communications**

Reference: SOP-029

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# Purpose

This Standard Operating Procedure outlines the requirements for protecting persons from incorrect use of site communications.

# Scope

This Standard Operating Procedure (SOP) applies to all activities at sites operated and/or under the control of Kaius Pty Ltd and its subsidiaries. It applies to all persons working on the site including exploration personnel, permanent, temporary and contract employees. This SOP forms a key part of the Kaius Safety & Health Management System which has been established to manage risk to an acceptable level and in accordance with all relevant legislation.

# Authority

This procedure can only be altered with the approval of the Site Senior Executive (SSE).

# Responsibilities

**Site Senior Executive (SSE)**

Site Senior Executive shall ensure:

* That all of the provisions of this SOP are implemented, and that compliance is achieved.
* Adequate resources are provided to maintain compliance with the requirements of this SOP, and
* The application and requirements of this SOP are periodically audited and reviewed.

**Supervisors**

Supervisors shall ensure:

* The requirements of this SOP are implemented.
* That workers, including contractors, are trained in the requirements of this SOP.
* All work undertaken within their area of responsibility is conducted in accordance with the requirements of this SOP.
* They monitor compliance with this SOP.
* This Standard is readily available to all workers and contractors.

**Mine Workers**

Mine Workers shall:

* Undertake the training and assessment provided by the SSE.
* Act in accordance with this SOP, and
* Not undertake any tasks for which they are unable to safely complete.

# Definitions and Abbreviations

The following definitions and abbreviations are used in this procedure.

|  |  |
| --- | --- |
| CMSHA | Mining and Quarrying Safety and Health Act (1999) |
| CMSHR | Mining and Quarrying Safety and Health Regulation (2017) |
| Competent Person | A person who has the necessary training, skills and capability to carry out the task |
| Exclusion Zone | A minimum safe distance from equipment operating in a mining work area |
| Mining Work Area | Any excavation work area, tip head and working dozer / grader area (does not apply to a grader working on a haul or access road) |
| Positive Communication | A structured two-way radio calling process ensuring a clear response received back from a transmitted message. |
| Shall | Indicates that a statement is mandatory |
| Should | Indicates a recommendation |
| SME | Surface mining equipment |
| Warning | Precedes steps that may cause personal injury. |

# Procedure

**Key Hazards**

From the risk assessment process, the key hazards identified associated with radio communications include:

* Incorrect use
* Distraction
* Defective Equipment, and
* Handheld two-way radios
* Limited range of radio communications / remote use of radio communications.
* Radio traffic during emergency situations

## General

The two-way radio system shall be used only for operational requirements and in the event of an emergency. All persons shall be trained and deemed competent in two-way radio usage. All communication shall be kept to the point and be brief in consideration of others using the two-way system. There shall be no idle chitchat, abusive language, belittling, defamatory comments, and / or swearing.

When using the two-way radio, ensure that you are not cutting over other personnel using the system. There is a short delay after a message has been sent, so wait 1 to 2 seconds before you transmit your reply or until you hear the feedback through the radio. Replying without waiting for the delay / feedback will mean that part of your message may be missed.

**Note: When Positive Communications is not achieved, cease the activity until an acknowledgement is received.**

**Any Pedestrian in the mining area shall have access radio access at all times, carry a handheld at all times or remain within earshot of vehicle radio.**

Listen to your radio for:

* Changes of material or destinations.
* Unusual traffic movement.
* Warning calls, and
* Instructions and notifications from supervisors.

Use your radios for:

* Warning other traffic when operating on narrow roads and blind spots.
* Overtaking/passing stationary equipment.
* Overtaking designated slow vehicles.
* Entering a designated work area (e.g. ROM or drill patterns).
* Seeking authorisation or clarification on a task or situation, and
* Raising awareness or communicating instructions relating to a situation or task.

## Radio Channels

The below radio channels are currently used on site at the Kaius Mine operation.

|  |
| --- |
| **Mine Radio** |
| **Channel** | **Purpose** |
| CH 1 | Common / Emergencies |
| CH 2 | Mine General |
| CH 3 | Maintenance Channel |
| CH 4 | Civil 1 |
| CH 5 |  |
| CH 6 |  |

Pre-Start Checks shall involve checking that the two way radio is functioning correctly. If the two-way radio becomes unusable during the shift, the operator is to tag the equipment or radio if standalone item) out of service, shall park up safely and use another vehicle’s two-way radio to notify the shift supervisor.

If there is a loss or radio communications due to poor signal, the operator of the vehicle shall notify the Supervisor as soon as practical to do so. If there is potential for interaction with no radio communications, work is to stop, and a risk assessment completed to address the risk.

## Radio Requirements around Workshop

Surface mining equipment shall not enter any workshop until positive radio communication has been made with workshop supervisor or delegate and a spotter is made available.

## Emergencies

Radios shall not be used in an emergency situation except for the purposes of reporting and communicating the emergency and by personnel directly involved in controlling the emergency. When reporting an emergency over the two-way radio call up is:

* “Emergency, Emergency, Emergency”
* Location of the Emergency
* Identification of yourself as the initiator
* Description of the incident / emergency type
* Type of assistance required
* If known the number of people injured and injury

Once the emergency has been initiated the emergency tone shall be activated across all channels. The scene controller shall declare “Radio silence” and all other radio users upon hearing an “emergency communication” shall -

* immediately stop any other radio transmissions
* Safely stop their activities
* Listen for further details and instruction
* Render assistance where requested or where possible
* Relay a message if instructed by an ERT member, staff member or an authorised Supervisor.

The radio silence and emergency tone will remain until the KRES Supervisor receives approval from the ERT personnel to formally lift the restriction.

## Positive Communication Examples

Positive communication shall be used to ensure effective two-way communications.

The person wishing to establish contact shall identify the target and also identify themselves to establish positive radio communications.

**Examples:**

**Production Example**

**Dozer 219:**

“Dozer 219 to digger 3600 requesting permission to enter your work area to clean up”.

**Digger 3600:**

“Digger 3600, Copy dozer 219, come in on the cab side and ensure you remain in full view of all operating equipment”.

**Dozer 219:**

“Dozer 219 to digger 3600, copy that, moving into cab side now.

**Ore Handling Plant (OHP) Example**

**Crusher Control:**

"Crusher control to loader 2289, do you copy?”.

**Loader 2289:**

"Loader 2289, receiving you crusher control”.

**Crusher Control:**

"Loader 2289, you have a green light and have permission to start tipping into the crusher”.

**Loader 2289:**

"Copy that crusher control, loader 2289 starting to tip now”.

**Workshop Example**

**Light Vehicle 01:**

“LV 01 to workshop, do you copy?”

**Workshop:**

“Workshop receiving you LV 01”.

**Light Vehicle:**

“Workshop, LV 01 requesting permission to enter your work area”.

**Workshop:**

 “Permission granted LV 01”.

**Light Vehicle:**

“Copy that workshop, LV 01 entering your work area”.

# Review Criteria

This document and the Asbestos Register shall be reviewed:

* Every three years
* When there is a change of method and/or technology that may affect the accuracy of this document, and
* When a significant incident has occurred that is relevant to this document and its subject matter.

# Safety and Environment

Safety and Environment are covered in the body of this procedure.

# Attachments, References and Related Documents

## References and Related Documents

Coal Mining Safety and Health Act 1999

Coal Mining Safety and Health Regulation 2017

## Attachments

No attachments for this SOP