SYSTEM PROCEDURE

MODIKWA PLATINUM MINE

Environmental Competence, Training and Awareness (EMS 4.4.2)
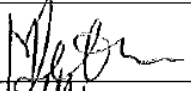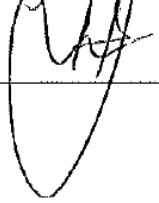
VERSION: 5

REVISION DATE: 2017-05-17

IMPLEMENTATION DATE: 2017-06-01

REFERENCE NUMBER: MOD-ALL-ENV-PRO-0006

OLD REFERENCE NUMBER: MOD-ALL-ENV-PRO-006

	NAME	POSITION	SIGNATURE	DATE
AUTHOR:	R Letlapa	Environment Officer		31/06/17
REVIEWED BY:	J Ndou	Environment Leader		31/05/17
APPROVED BY:	H Tyira	Business Area Leader: Sustainable Development		8/05/17

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1 Aim

1.1 This procedure details the approach to the identification of training and development needs and the types of environmental training available at Modikwa Platinum Mine.

2 Scope

2.1 The scope of the EMS is Modikwa Platinum Mine Operation.

3 Definition

Term	Definition
Environment	Surroundings which an organisation operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.
IMBEWU	A law firm specialising in environmental law, compiles and updates the legal register
IsoMetrix	Software package, used as a tool for action management

4 Abbreviations

Abbreviation	Explanation
BAL	Business Area Leader
CSO	Chief Safety Officer
HRD	Human Resources Department
SHE	Safety, Health and Environmental
ALL	Everybody
ENV	Environment
SD	Sustainable Development
PRO	Procedure
ISO	International Organization for Standardization
MPM	Modikwa Platinum Mine
EMS	Environmental Management System
EMP	Environmental Management Programme
IT	Information Technology
ZZG	MPM's Email Communication Group

5 Responsible for Review

5.1 Environmental leader and BAL: SD

6 Responsible for Implementation

6.1 Environmental steering committee members

6.2 Modikwa Platinum Mine Training centre.

7 General

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7.1   Contravention

7.1.1   Breach of this Procedure may lead to disciplinary / legal action and system non-conformance.

7.2   Distribution:

7.2.1   All controlled and approved documents will be distributed via document control office system via ZZG e-mail system. Direct access of document will be made available via official link of Eureka.

7.3   Additional Information

7.3.1   Nil

8   Safety Requirements for this Procedure

8.1   Nil

9   Procedure

9.1   Identification of training needs:

9.1.1   The identification of environmental training and development needs are derived from an analysis of the type of role different categories of employees play in the development, implementation and maintenance of the EMS. The following categories are considered:

9.1.1.1   Senior Management

9.1.1.2   Middle management

9.1.1.3   Supervisors

9.1.1.4   Operators

9.1.1.5   Visitors and contractor personnel

9.1.2   Each of these categories has different responsibilities in terms of the EMS, and therefore has different knowledge requirements and related training requirements to obtain that knowledge. The different categories and training needs are summarised in the matrix in Appendix1.

9.2   Induction for all employees, including contractors:

9.2.1   All new employees (including contractor employees) undergo MPM induction. A section on environmental management at MPM has been included in the training content.

9.2.2   This induction is compulsory for all employees.

9.2.3   Employees returning from leave attend ex-leave induction (annually), which also includes an environmental component.

9.2.4   The content of the environmental section of the induction programme has been developed by the Training Department, in consultation with the Environmental Leader.

9.2.5   The induction will focus on following:

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9.2.5.1   Significant environmental impacts as identified in the EMS workshops (per department / work area).

9.2.5.2   Overview of Operational Procedures and standards.

9.2.5.3   Trends in incidents reporting and closing out.

9.2.5.4   Trends in audit findings and corrective measures.

9.3   General environmental awareness training:

9.3.1   The Environmental Officer has developed a programme to provide environmental awareness to operators, mining crews and processors at the Safety Toolbox Talks / safety meeting.

9.3.2   Input is given to the different business areas on a rotational basis. The Environmental Leader determines the topics and new topics are introduced or published to the entire mine. The site team leaders and supervisors discuss the topics at different meeting sessions (Pre-task observation and coaching sessions).

9.3.3   A monthly environmental awareness topic for discussion is drafted by the Environmental Leader and distributed to all areas.

9.3.4   The SHE Representatives discuss these topics at the Safety Toolbox Talks at the different Business Areas.

9.3.5   The topics are also displayed on the notice boards.

9.3.6   Ad hoc environmental awareness sessions to various departments occur on request. The presentations mainly focus on the environmental issues relevant to individual tasks.

9.4   Provision for site specific environmental awareness and coaching:

9.4.1   The Environmental Leader and the training centre will develop an induction model that covers generic environmental aspects.

9.4.2   On adhoc bases, specific training will be scheduled for specific group of employees as informed by change in laws, audit findings or specific inspection finding. A training program such as the Matrix will be followed.

9.4.3   The environmental department and HRD will ensure that awareness material (standards, procedure and induction model) focuses on the following:

9.4.3.1   Waste prevention and control (implementation of the waste management procedure).

9.4.3.2   Hydrocarbon and chemical spill reporting and clean-up.

9.4.3.3   Storing and handling of chemicals.

9.4.3.4   Rehabilitation.

9.4.4   Supervisory staff within a specific Business Area will be trained with the necessary knowledge and information on standard and procedure in line with environmental aspects applicable to their business area.

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9.5   Competency training:

9.5.1   The HRD department will train safety representative. The training material will cover environmental topics and also refer to ISO 14001 best practices. This is to ensure that safety reps communicate the info with crews at regular basis and when there is a need.

9.5.2   This training is done both on a one to one basis (e.g. IsoMetrix operation and setting of environmental programmes) and through workshops (e.g. Departmental EMS review workshops & EMS training).

9.5.3   If required, external organisations may be requested to provide training to selected employees (e.g. courses on EMS or EMS Auditing).

9.5.4   Competence and the effectiveness of training and development initiatives as described in the matrix will be determined through the following methods:

9.5.4.1   Trend analysis of incidents reported.

9.5.4.2   Analysis of work areas during visits and audits.

9.6   Training records:

9.6.1   The HRD department will keep record of induction and refresher training.

9.6.2   The environmental department to keep all the record of other training conducted, this includes adhoc training buy external service providers.

9.7   Review of training material:

9.7.1   The content of the induction, standards and procedures will be updated at an adhoc basis.

10   History of Changes

Reason for Change - Index	
A. As a result of incidents	B. As a result of audit findings
C. New/changes in governance documents	D. Changes in legislation
E. Changes in technology	F. Changes in machinery/equipment
G. Results of risk assessments	H. Change in training requirements
I. New document format	J. Change due to spelling or grammatical error
K. To integrate a special instruction into the document control system	

Date of change	Revised Item (Paragraph number)	Changes Made	Reason Code	Name of reviewer
2015-02-04	All	New document format	I	R Letlapa
2015-03-19	All	As per the audit findings	B	R Letlapa
2015-06-30	10 History of changes	Changes were made on wording on reasons to make previous changes, as per the audit findings and not audit recommendation. Changes on Assistance Environmental leader to reflect Environmental officer	B	J Ndou

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2016-07-05	All	New document format	I	R Letlapa

11 Record Control

11.1 Records to be maintained in accordance with this Procedure:

Identification	Reference number	Responsible for filing	Responsible for maintenance	Location of storage area	Retention period	Method of disposal
Environmental Competence, Training and Awareness (EMS 4.4.2)	MOD-ALL-ENV-PRO-006	Document Controller	Standards Officer	Document Controller Library	2 Years	Printed document will be destroyed by tearing

12 References

12.1 TRD 084 Health, Safety and Environment (general Induction)

13 Appendices

13.1 Appendix 1: Environmental awareness/training and development needs matrix

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Appendix 1 - Environmental Awareness / training and development needs matrix

Occupation Category	EMS responsibility / role	Required knowledge and output	Training required	Interval
Senior management (HOD's)	Managing the EMS	Setting environmental policy	Initial EMS workshops	Once-off
			EMS Management Review	Annually
		Understanding aims of ISO14001 and the EMS	Induction and ex-leave training (General induction modules)	Annually
		Knowledge of organization's significant environmental impacts and risks	Initial EMS workshops	Once-off
			Departmental EMS Review Workshops	Annually
		Directing, reviewing EMS	EMS Management Review	Annually
		Knowledge of relevant operational and system procedures.	On the job coaching	Continuously
Middle management (specifically Environmental Representatives)	Implementing and daily management of EMS	Understanding aims of ISO 14001 and the EMS and Environmental Policy.	Induction and ex-leave training (General induction modules)	Annually
		Knowledge of department's significant environmental impacts and risks	Initial EMS workshops	Once off
			On the job coaching	Continuously
			Database training	Once-off, refresh annually
		Setting departmental objectives for environmental improvement.	Departmental EMS Review Workshops	Annually
		Knowledge of relevant operational and system procedures.	On the job coaching	Continuously

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Occupation Category	EMS responsibility / role	Required knowledge and output	Training required	Interval
Supervisors	Executing actions if assigned Adherence to procedure to prevent / control impacts	Understanding aims of ISO 14001 the EMS and Environmental policy.	Induction and ex-leave training (General induction modules).	Annually
		Knowledge of department/sections' significant environmental impacts.	On the job coaching	Continuously
			Awareness & information sharing by ISO 14001 Representatives	Continuously
		Knowledge of relevant operational and system procedures.	On the job coaching	Continuously
Operators / Processors	- Executing assigned EMP actions - Controlling personal & work activities to prevent impacts.	General awareness of ISO 14001, EMS and environmental policy.	Induction and ex-leave training (General induction modules).	Continuously
		Understand environmental requirements relating to work activities and consequences of not following requirements.	Induction and ex-leave training (General induction modules).	Annually
			Training & information sharing by Environmental officer , Environmental Leader, ISO 14001 Representatives and / or supervisors	Continuously
		Knowledge of relevant operational procedures.	Induction and ex-leave training (General induction modules).	Annually
			On the job coaching	Continuously

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Occupation Category	EMS responsibility / role	Required knowledge and output	Training required	Interval
Visitors and contractor personnel.	Managing and controlling daily actions to prevent/control impacts	Basic awareness of ISO 14001, EMS and environmental policy.	Modikwa induction module	Once off, annual review if applicable
		Knowledge of relevant operational procedures	On the job coaching	Continuously
		Knowledge of relevant operational procedures Understanding and compliance to procedure on environmental requirements for contractors	Training & information sharing by Assistant to Environmental Leader, SHE Representatives and / or supervisors.	Continuously
			Modikwa induction module	Once off, annual review if applicable
		Understanding environmental consequences of personal actions and performance	On the job coaching	Continuously
		Understanding environmental consequences of personal actions and performance	Induction & information sharing by Assistant to Environmental Leader, SHE Representatives and / or supervisors.	Continuously
Personnel requiring specific training identified by SHE Manager, Environmental Officer, HOD's or Training Department.	Managing and controlling daily actions to prevent/control impacts.	Examples include, but are not limited to: • Waste management • Hazardous chemical handling • Non-conformance and incident reporting	On the job coaching on procedure and standard	As required

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