Bakgatla ba Kgafela

Design proposal for the Cultural Precinct of Saulspoort, Pilanesberg

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Glossary of terms

After use	The use of which a mining site, or part of a site, is determined when mineral extraction is completed.
Closure	Closure, in the case of mining operations discontinued or abandoned prior to the coming into force of the Minerals Act, 1991, means where a closure certificate has been issued in terms of Regulation 2.11 under the Mines and Works Act, 1956, or in any other case, where a closure certificate has been issued in terms of Section 12 of the Minerals Act, 1991 or in terms of Regulation 2.11 there under, and where a closure certificate provided for in Section 32(2) of the Atmospheric Pollution Prevention Act, 1965, has been issued.
Corridor	Corridors build up along well used linkages and serve as spines for the opening up of new tourism development.
Cutanic	A property of subsurface horizons showing clay movement downwards from topsoil horizons. Cutans consist of material which is usually finer than and has an organisation different to the material that makes up the surface on which they occur. A relatively recent soil-forming process.
Decommissioning	The activity or process that begins after cessation of prospecting activities or mineral production (including metallurgical plant production) and ends with closure. It involves, inter alia, the removal of unwanted infrastructure, the making safe of dangerous excavations and surface rehabilitation with a view to minimising the adverse environmental impacts of mining activities remaining after cessation of mineral production. It includes the aftercare or maintenance that may be needed until closure.
Environmental Impact Assessment (EIA)	An EIA is an assessment of the positive and negative environmental consequences of the development of the proposed project. The primary objective of the EIA section is to aid decision-making by providing factual information on the assessment of the impacts and determining their significance and on which to base valued judgements in choosing one alternative over another.
Hillslope units	Configuration of the landform consisting of crest, scarp, midslope, footslope and valley bottom.
Identified Resource	Resources whose location, grade, quality are known, or estimated from specific geological evidence, and includes economic, marginally economic and sub-economic components. It is also encompasses demonstrated and inferred subdivisions (DME 2000c).
Landfill	Disposal of relatively inert domestic and industrial wastes by burial in holes and tips.
Magnitude of impact	Magnitude of impact means the combination of the intensity, duration and extent of an impact occurring.
Melanic	A dark-coloured, structured topsoil horizon with high base status.
Mining	Mining is the making of any excavation for the purpose of winning a mineral, and it includes any other associated activities and processes (DME 2000).
Mining area	Mining area means the area comprising the subject of mining authorization, including: • any adjacent surface of land; • any non-adjacent surface of land, if it is connected to such an area by means of any road, railway line, power line, pipe line, cable way or conveyer belt; and • any surface of land on which such road, railway line, power line, pipe line, cableway or conveyer belt is located, under the control of the holder of such permit or authorization and which he is entitled to use in Connection with the operations performed or to be performed under such permit or authorization.
Mineral	A mineral includes inter alia sand, soil, clay, gravel, rock, ore, coal and tailings. A mineral occurs in, on or under the earth, water or tailings, as a liquid, solid or gas (DME 2000).

Non-renewable resources	Resources that exist in a fixed quantity in the Earth's crust and thus theoretically can be completely depleted are called non-renewable resources. It must be noted that these resources can be depleted much faster than they are formed.
Overburden	Non-processable material overlying mineral deposits that must be stripped off before extraction can proceed.
Paraduplex	A soil with a relatively permeable topsoil overlying a horizon with a significant higher clay content, stronger developed structure and harder consistence.
Partial closure	The closure of a part, section or portion of a mine. the environmental management issues that need to be addressed for partial closure are the same as those required for closure of the whole mine.
Potentially renewable resource	A potentially renewable resource can be renewed fairly rapidly (hours to several decades) through natural processes. Examples of such resources include forest trees, grassland grasses, wild animals, fresh lake and stream water, fresh air, and fertile soil.
Reclamation	Process of bringing back a derelict or disused site to some productive or useful purpose.
Renewable resources	Solar, wind and wave energy is considered to be a renewable resource because on a human time scale it is essentially inexhaustible. It is expected to last at least 6.5 billion years while the sun completes its life cycle.
Restoration	Process of bringing back a derelict or disused site to a properly functioning state; often used to imply the original or similar land use.

Registered / licensed disposal facility	Registered / licensed disposal facility means a facility as determined by the Director: Mineral Development after consultation with the Department of Water Affairs and Forestry, for the disposal of waste.
Reserve base	According to DME 2000c a reserve base is defined as that of an identified resource that meets specified minimum physical and chemical criteria related to current mining and production practices, including those for grade, quality, thickness, and depth. The reserve base is the in situ demonstrated resource from which reserves are estimated. It may encompass those parts of the resource that have a reasonable potential for becoming economically available within planning horizons beyond those that assure proven technology and current economics. The reserve base includes those resources that are currently economic (Demonstrated reserves) and marginally economic (Demonstrated Marginal Reserves)
Reserves	Reserves refer to that part of the reserve base, which could be economically extracted at the time of determination
Ripping	Deep cultivation of compacted soil using a shanked ripping tool attached to a crawler tractor.
Scarification	Light cultivation of soil surface to improve the seedbeds, prevent lamination between successive soil layers and increase water infiltration.
Sensitive Area	A sensitive area or environment can be described as an area or environment where a unique ecosystem, habitat for plant and animal life, wetlands or conservation activity exists or where there is a high potential for ecotourism.
Sensitive environments	Sensitive environments are the following: • Limited development areas (section 23 of the Environment Conservation Act, 1989 (Act No. 73 of 1989).

	• Protected natural environments and national heritage sites. • National, provincial, municipal and private nature reserves. • Conservation areas and sites of conservation significance. • National monuments and gardens of remembrance. • Archaeological and palaeontological sites. • Graves and burial sites • Lake areas, offshore islands and the admiralty reserve. • Estuaries, lagoons, wetlands and lakes. • Streams and river channels, and their banks. • Dunes and beaches. • Caves and sites of geological significance. • Battle and burial sites. • Habitat of Red Data Book species. • Areas or sites of outstanding natural beauty. • Areas or sites of special scientific interest. • Areas or sites of special social, cultural or historical interest.
Significant impact	An impact can be deemed significant if consultation with the relevant authorities and other interested and affected parties, on the context and intensity of its effects, provide reasonable grounds for mitigating measures to be included in the environmental management report. The onus shall be on the proponent to include the relevant authorities and other interested and affected parties in the consultation process. Present, and potential future, cumulative and synergistic effects should all be taken into account.
Soil form	Higher category of the Soil African soil classification system, defined by a unique vertical sequence of diagnostic horizons and/or materials.
	Describe a programme of strategic initiatives by Government aimed at unlocking the inherent and underutilised economic development potential of certain specific spatial locations in South Africa.
Spoil	Bulk waste material produced along with the marketable mineral: production waste, substandard and unmarketable material, overburden, etc. that has to be disposed of.
Subsoil	Subsoil means those layers of soil and weathered rock immediately beneath the topsoil that overlay the hard rock formation.
Tailings	Tailings are any waste materials, slimes or residue produced form mining or the professing of minerals (DME 2000).
Topsoil	Topsoil means the layer of soil covering the earth and which provides a suitable environment for the germination of seed, allows the penetration of water, is a source of micro-organisms, plant nutrients and in some cases seed, and of a depth of 0.5 m or any other depth as may be determined by the Director: Mineral Development for each mining area.
Vertic	Soils high in expanding clay that form large cracks on drying; self-mixing.

List of abbreviations and units

Au	Gold
ACP	Anglo Platinum Converting Process
BDM	Bojanala District Municipality
BRPM	Bafokeng-Rasimone Platinum Mine
DACE	Department of Agriculture, Conservation and Environment
DEAT	Department of Environmental Affairs and Tourism
DWAF	Department of Water Affairs and Forestry
DME	Department of Minerals and Energy
EAMP	Environmental Assessment and Management Programme
EIA	Environmental Impact Assessment
EIM	Environmental Impact Management
EMP	Environmental Management Plan
EMS	Environmental Management System
EMPR	Environmental Management Programme Report
GDP	Gross Domestic Product
IEC	Independent Environmental Consultant
IEM	Integrated Environmental Management
Ir	Iridium
KP	Kruidfontein Project
LDO	Land Development Objective
LED	Local Economic Development
MAE	Mean Annual Evaporation
MAR	Mean Annual Runoff
MAP	Mean Annual Precipitation
MEM	Mining Environmental Management
MKLM	Moses Kotane Local Municipality
NDA	National Department of Agriculture
NEMA	National Environmental Management Act (Act No. 36 of 1998)
NWPTB	North West Parks and Tourism Board
Os	Osmium
PATII	Priority Area for Tourism Infrastructure Investment
Pd	Palladium
PGEs	Platinum Group Elements
PGM	Platinum Group Metal
PNP	Pilanesberg National Park
Pt	Platinum
Rh	Rhodium
RPM	Rustenburg Platinum Mines Limited
Ru	Ruthenium
SABS	South African Bureau of Standards
SDI	Spatial Development Initiative
tpm	tons per month
tpa	tons per annum
VAC	Visual Absorption Capacity
WTO	World Tourism Organisation

List of figures and tables