

Curriculum Vitae

Andrew (Jim) Pooley – Principal Mining Engineer/Managing Director



- Profession:** Principal Mining Engineer
- Education:**
- B. Eng (Hons) Mining Engineering, Nottingham University, UK, 1994.
 - Foundation Year Engineering, Cardiff University, UK, 1991.
- Registrations / Affiliations:**
- Registered as a Professional Engineer with ECSA.
 - Fellow of the South African Institute of Mining and Metallurgy.

Specialisation

Design of opencast and underground hard rock mines including determination of mining strategy, mining method, layout and scheduling, equipment selection, determination of manpower requirements, capital and operating cost estimating. Management of multi-disciplinary project teams. Financial evaluation of mining projects. Due diligence investigations. Feasibility studies.

Expertise

Jim has approximately 20 years' experience in the mining industry. This time has been split between production work in conventional and mechanised mines, project work and consulting. He has been involved in a number of large pre-feasibility and feasibility studies and has also been involved in the project management and implementation of several projects. Jim is currently active in the following technical areas:

- Project management. Management of multi-disciplinary teams conducting studies for new mining projects.
- Feasibility studies. Mining design and detailed costing for various projects.
- Due diligence. Technical audit and expert opinion on existing mining operations.



Employment History

2013 to Present	Principal Engineer & MD	Bara Consulting (Pty) Ltd
2010 - 2013	Principal Engineer & CEO	Turgis Consulting (Pty) Ltd
2006 - 2009	Principal Engineer & Operations Director	Turgis Consulting (Pty) Ltd
2001 - 2005	Principal Engineer	Turgis Consulting (Pty) Ltd
1999 - 2001	Senior Mining Engineer	Badger Mining & Consulting
1998 - 1999	Master Operator	Target Division of Avgold
1997 - 1998	Junior Engineer (Mining)	Johannesburg Division of Avgold
1995 - 1997	Junior Engineer (Mining)	Hartebeestfontein Division of Avgold
1994 - 1995	Research Assistant, Materials Division	Engineering Faculty, Cardiff University, UK

Selection of Recent Experience

Chrome

- DCM Chrome – Expert opinion in legal matter.
- Sky Chrome – Review of mining plan and reserves.
- Dwarsrivier Chrome Mine – Review and re-design of tips for strike conveyor belts.
- Stellite Chrome Mine – Concept study.
- Mecklenburg Project – Pre-feasibility study.
- Samancor Chrome – Concept studies for 10 different prospects.
- Horizon Chrome Mine – Feasibility Study

Platinum

- Two Rivers Platinum – Feasibility Study mine design.
- Impala Platinum – Business Plan and Life of Mine Plan review
- Grootboom, Boyton – Feasibility study lead consultant.
- Lonmin, Akanani – Independent review of mine design.
- Afplats – feasibility study for the Leeuwkop platinum project
- Anglo Platinum – Life of mine option analysis for Union Section Mine.
- Anglo Platinum – Watervall Platinum Mine re-engineering
- Anglo Platinum – PPRust conceptual study for underground mining

Iron Ore

- Conceptual level studies and option analysis for the Askaf project in Mauritania for Sphere Resources.
- Conceptual level tradeoff between shaft and bored tunnel access for the Manulinskoe iron ore deposit in Ukraine for Ferrexpo.
- Feasibility study and detailed zero based costing exercise for Yeristovskoe iron ore project in Ukraine for Ferrexpo.
- Optimisation work and plan review for the Gorishne-Plavninskoe Lavrikovskoe open pit magnetite mine in Ukraine for Ferrexpo. Existing mine currently producing approximately 30 Mtpa ore.
- Concept study for Belanovskoe open pit magnetite project in Ukraine for Ferrexpo.
- Concept study for Galeshenkoe underground magnetite/hematite mining project in Ukraine for Ferrexpo.
- Consulting to the existing underground Nova iron ore mine in Ukraine for Ferrexpo on current operations and concept study to increase production.

Manganese

- Feasibility study for Ntsimbintle/Pallinghurst Kalahari Project in the Northern Cape Province of South Africa.
- Conduct of selected aspects of concept study for the Kongoni project in South Africa for Amari.
- Technical review and advice to a party bidding for the purchase of the Kalaghadi Manganese project-underground mine in South Africa.
- Pre-feasibility study for the Gravenhague Project for Aquilla Steel.

Base Metals

- Mining method trade off study for the Lubembe copper project in the DRC for Metorex.
- Dikulushi (Copper, DRC) – Feasibility Study Pit optimisation and underground mining method/access/ventilation design – Anvil
- Dilala (Copper, Cobalt, DRC) – Scoping study underground mine design – Metorex
- Lonshi Mine (Copper, DRC) – Review of LoM planning and update. – First Quantum.
- Bon Accord (Nickel, South Africa) – Concept study to feasibility study.

Gold (Greenstone and Vein Type Deposits)

- Conceptual study for the underground extension to the Sadiola open pit in Mali for Anglo Gold Ashanti
- Feasibility study for the Upper East Ore Zone at Bulyanhulu Gold Mine in Tanzania for Barrick.
- Feasibility study for the underground extension to the North Mara open pit in Tanzania for Barrick.
- Feasibility study for the Indarama gold mine in Zimbabwe for Great Lake Minerals,



- Pre-feasibility study for an underground operation at the Geita Gold Mine in Tanzania for Anglo Gold Ashanti.
- Feasibility Study for the Lily Gold Mine near Barberton in South Africa for Eastern Goldfields.

Gold (Witwatersrand Type Deposits)

- DBM Gold Project – Pre-feasibility study for intermediate depth mine for Wits Gold.
- Modder East Gold Mine – Feasibility study and aspects of detail design and detailed planning for new gold mine east of Johannesburg South Africa.
- Harmony – Pre feasibility study for new mines at Evander South and Rolspruit.

Uranium

- Trekkopjie Project feasibility study (Uramin). Input into the study in the areas of mining, infrastructure and bulk power and water supplies.
- Dominion Reefs Feasibility study for Uranium One.
- Conceptual studies for uranium deposits in the Western Cape Region of South Africa for Uramin.