



Mining Developments In the Northern Territory

September 2011

This document contains a summary of likely new mining developments in the Northern Territory over the next 1-3 years. It is not intended to be comprehensive and does not contain a number of projects that are at various stages of feasibility study. For further information on mining developments, contact the Resource Development Division of Department of Resources or visit the website at www.minerals.gov.au or email to Orestruck@nt.gov.au

www.minerals.nt.gov.au/ntgs

MINING DEVELOPMENTS SUMMARY – September 2011 UPDATE

1. Recent (Past 24 months)

Company	Project	Location	Product	Development
Gemco	Gemco Refirb	Groote Eylandt	Manganese	Plant upgrade
Crocodile Gold	Brocks Creek	Pine Creek	Gold	Reopen mine
Crocodile Gold	Howley	Pine Creek	Gold	Reopen mine
Crocodile Gold	Union Reefs	Pine Creek	Gold	Reopen plant
OM Manganese	Bootu Creek	Tennant	Manganese	Secondary Plant
Matilda Zircon	Tiwi Islands	Tiwi	Zircon	Reopen mine
Crocodile Gold	Princess Louise	Pine Creek	Gold	New mine
Crocodile Gold	North Point	Pine Creek	Gold	New mine

2. Pending (Next 12 months)

Company	Project	Location	Product	Development
AAM	Spinifex Bore	Alice Springs	Garnet sands	New mine
Aust Ilmenite Res	SILL80	Roper River	Fe, Ti, V	New mine
Aard Metals	Warrego Tails	Tennant	Magnetite, Au	Reprocessing
Matilda Zircon	Lethbridge Sth	Tiwi Islands	Zircon	New deposit
Minemakers	Wonarah	Tennant	Phosphate	New mine
Redbank Mines	Redbank	Gulf	Copper	New pits & plant

3. Potential (Next 12-36 months)

Company	Project	Location	Product	Development
Arafura Resources	Nolans	Arunta	REO, P, U	New mine
Crocodile Gold	Cosmo Deeps	Pine Creek	Gold	Underground
Energy Metals	Bigrlyi	Ngalia Basin	U, V	New mine
ERA Ltd	Ranger 3 Deeps	Jabiru	Uranium	Underground
Korab	Geolsec	Batchelor	Phosphate	New mine
Newmont	Callie Deeps	Tanami	Gold	Expansion
Sherwin Iron	Roper River	Roper River	Iron ore	New mine
Tanami Gold	Tanami Central	Tanami	Gold	Reopen mine
Thor Mining	Molyhil	Alice Springs	Mo, W	Reopen mine
TNG Limited	Mt Peake	Alice Springs	V, Ti, Fe	New mine
Vista Gold	Mt Todd	Katherine	Gold	Reopen mine
Western Desert Res	Roper Bar	Roper River	Iron Ore	New mine
Westgold Res	Rover	Tennant	Gold, Cu	New mine
Xstrata	McArthur River	Gulf	Zn, Pb & Ag	Expansion

PENDING MINE DEVELOPMENTS – NEXT 12 MONTHS

Mine Name	SPINFEX BORE
Company	Australian Abrasive Minerals Pty Ltd
Contact	Robert Brand – Director & Project Manager Phone: (08) 9315 2177 Email: robert@aaminerals.com.au
Location	Approx 170 kms north east of Alice Springs
Description	New open cut mine strip mining. Onsite processing wet screening plant to produce concentrate and dry magnetic & electrostatic separation. Final product trucked to Alice Springs for road/rail to Darwin or Adelaide.
Product	Garnet sands
Resource	800,000 tonnes
Mine Life	25 years
Approvals	Environmental – August 2011 Mining – pending
Schedule	Site preparation – late 2011 Production – late 2011 or early 2012
Jobs	Construction – NA Production – 16-20
Capex	Unknown

Mine Name	SILL 80 (ROPER HEAVY MINERALS)
Company	Australian Ilmenite Resources Pty Ltd
Contact	Geoff Fanning – Director Phone: (08) 8941 3213 Email: geofffanning@ilmenite.com.au
Location	Approx 450 kms southeast of Darwin & 105 kms east of Matarranka
Description	New open cut strip mining of top 1-3 m from surface. Onsite processing through wet gravity separation plant. Ilmenite concentrate is dried, packed in Bulka Bags and trucked to Darwin for export. Initial production 100,000 tpa ramping up to 200,000 tpa in 2012.
Product	Magnetite, Ti, V
Resource	4.5 Mt +
Mine Life	20 years +
Approvals	Environmental – In process Mining – pending enviro approvals
Schedule	Bulk sampling – Q3/4 2011 Production – mid 2012
Jobs	Construction – unknown Production – 5 to 10
Capex	unknown

Mine Name	WARREGO TAILINGS PROJECT
Company	Aard Metals Limited
Contact	Pepita Maiden – Managing Director Phone: (02) 9233 5544 Email: pep@aard.com.au
Location	48 kms west of Tennant Creek
Description	Reprocessing of old tailings dams to extract magnetite (gravity and magnetic separation) and gold (CIP process).
Product	Gold & Magnetite
Resource	9.11Mt of tailings containing 30-55% magnetite (2.91Mt @ 67% Fe - JORC compliant), 119,000 oz gold and 16,500 tonnes copper.
Mine Life	Approx 5 years
Approvals	Development proposals submitted to government in September 2011.
Schedule	Construction – mid 2012 Production – late 2012
Jobs	Construction – unknown Production – approx 50
Capex	Approx \$20M

Mine Name	LETHBRIDGE SOUTH
Company	Matilda Zircon
Contact	Peter Gazzard – Technical Director Phone: (08) 6389 6488 Email: Peter.Gazzard@matildazircon.com.au
Location	Tiwi Islands – approx 50 kms north of Darwin
Description	Surface sand mining operation utilising wet gravity separation plant to produce a zircon concentrate. Concentrate exported to China. Mining operations will sequentially move through a series of deposits.
Product	Zircon
Resource	Total resource is undefined
Mine Life	5-10 years
Approvals	Environmental – NA Mining – pending
Schedule	Construction – Q3 2011 Production – Q4 2011
Jobs	Construction – 50 to 100 Production – 120 (plus 140 for transport)
Capex	Unknown

Mine Name	WONARAH/ARRUWURRA (STAGE 1)
Company	Minemakers Limited
Contact	Neville Bergin – General Manager Projects Development Phone: (08) 9264 7000 Email: nevilleb@minemakers.com.au
Location	250 kms east of Tennant Creek
Description	Stage 1 Development Proposal - Proposed open cut mining with onsite beneficiation for direct shipping of ore. Up to 3Mtpa ore transported to Tennant Creek and then railed to Darwin for export.
Product	Phosphate
Resource	Wonarah – 330 Mt @ 18.9% P ₂ O ₅ Arruwurra – 131 Mt @ 18.6% P ₂ O ₅
Mine Life	>30 years
Approvals	Environmental – April 2010 Mining – Pending “Go Ahead” Decision
Schedule	Construction – mid 2012 Production – mid 2012
Jobs	Construction – 50 to 100 Production – 120 (plus 140 for transport)
Capex	Estimated \$107M

Mine Name	REDBANK (OXIDE PROJECT)
Company	Redbank Mines Limited
Contact	Bruce Morrin – Managing Director Phone: (08) 9322 6045 Email: bruce.morrin@redbankmines.com.au
Location	Approx 900 kms southeast of Darwin in Gulf of Carpentaria
Description	Existing mine expansion of oxide operations. Establish 3 new open cut pits. Transport oxide ore to existing Sandy Flat mine site for processing. Ore treated by Heap Leach method and copper extracted through expansion of existing ion exchange/cementation circuit.
Product	Copper
Resource	5.2Mt @ 1.44% Cu
Mine Life	5 years +
Approvals	Environmental (NT) – April 2010 Mining – pending Environmental (Commonwealth) – May 2011
Schedule	Construction – 2012 Production – 2012
Jobs	Construction – unknown Production – unknown
Capex	Unknown

POTENTIAL MINE DEVELOPMENTS – NEXT 12 - 36 MONTHS

Mine Name	NOLANS
Company	Arafura Resources Limited
Contact	Steve Ward – Managing Director & CEO Phone: (08) 6210 7666 Email: arapura@arapuraresources.com.au
Location	135 kms northwest of Alice Springs
Description	New mine. Open cut mining with road and rail transport to substantial chemical processing plant at Whyalla in SA.
Product	Rare earths & phosphate (minor uranium)
Resource	30.3 Mt containing 2.8% REO 12.9% P2O5 (0.44 lb/t U ₃ O ₈)
Mine Life	20 years +
Approvals	Environmental – EIS in preparation. Mining – subject to environmental
Schedule	Full feasibility in progress. EIS in preparation. Possible construction in 2012 with production in 2013/14.
Jobs	Unknown
Capex	Estimated \$70M (mine)

Mine Name	COSMO DEEPS
Company	Crocodile Gold Australia Pty Ltd
Contact	David Keogh – Chief Operating Officer Phone: (08) 8943 6400 Email: dkeogh@grocgold.com
Location	140 kms SSE of Darwin and 50 kms NW of Pine Creek.
Description	Reopen the Cosmo Howley mine. Proposed underground mining. Ore could be transported to Union Reef plant for processing or new processing plant established onsite. Commenced exploration decline in June 2010.
Product	Gold
Resource	8.74Mt @ 4.55 g/t gold
Mine Life	Approx 10 years
Approvals	Development proposal yet to be submitted
Schedule	Construction – 2012 Production – 2012/13
Jobs	Construction – unknown Production – unknown
Capex	Approx \$20M

Mine Name	BIGRLYI
Company	Energy Metals Limited
Contact	Lindsay Dudfield – Director Phone: (08) 9322 6904 Email: lindsay@energymetals.net
Location	Approx 340 kms NW of Alice Springs
Description	Potential open cut mine with on-site processing plant. Updated Scoping Study and environmental studies in progress. Recent bid by China Uranium Development Company to acquire up to 70% of shares in Energy Metals.
Product	Uranium
Resource	7.65 Mt @ 0.14% U ₃ O ₈ Total 23.4 M lbs U ₃ O ₈ & 43.7 M lbs V ₂ O ₅
Mine Life	Initial Scoping Study based on 12 years
Approvals	Updated Scoping Study and environmental studies in progress. Development proposals yet to be submitted.
Schedule	Construction – unknown Production – unknown
Jobs	Construction – unknown Production – unknown
Capex	Unknown.

Mine Name	RANGER 3 DEEPS
Company	Energy Resources of Australia Ltd (ERA)
Contact	Rob Atkinson – Chief Executive Phone: (08) 89243500 Email: newprojects@era.riotinto.com
Location	Approx 250 kms east of Darwin
Description	Possible underground mining operation below Ranger 3 pit. Construction of exploration decline for further drilling of mineralisation to define JORC Mineral Resource.
Product	Uranium (U ₃ O ₈)
Resource	15-20Mt containing 30-40,000 t uranium oxide (non JORC)
Mine Life	Undefined
Approvals	Development proposals yet to be submitted.
Schedule	Construction – unknown Production – unknown
Jobs	Construction – unknown Production – unknown
Capex	Unknown

Mine Name	GEOLSEC
Company	Korab Resources Limited
Contact	Andrej Karpinski – Executive Chairman Phone: (08) 9474 6166 Email: akk@korabresources.com.au
Location	Approx 70 kms south of Darwin and 2 kms west of Batchelor
Description	Proposed open cut mining of surface or near surface deposit. Processed on site and trucked to Darwin for export.
Product	Phosphate
Resource	No quoted resource estimate
Mine Life	undefined
Approvals	Development proposals yet to be submitted. Resource drilling still in progress during 2011.
Schedule	Construction – unknown Production – unknown
Jobs	Construction – unknown Production – unknown
Capex	Approx \$300,000

Mine Name	CALLIE DEEPS
Company	Newmont Australia
Contact	Greg Allan – A/General Manager Operations Phone: (08) 8957 8200 Email: greg.allan@newmont.com.au
Location	540 kms NW of Alice Springs
Description	Expansion of existing mine. Possible expansion of existing underground operations to depth with installation of new processing plant and mine camp and infrastructure at Callie (40 kms west of the Granites).
Product	Gold
Resource	12.77Mt @ 6.02 g/t Au
Mine Life	Up to 15 years
Approvals	Initial studies and Prefeasibility studies undertaken. Feasibility studies in progress. Development decision yet to be made.
Schedule	Unknown
Jobs	Unknown
Capex	Estimated \$500M +

Mine Name	ROPER RIVER IRON ORE PROJECT
Company	Sherwin Iron Limited (formerly Batavia Mining Limited)
Contact	Jerry Ren – Managing Director Phone: (08) 9327 0980 Email: Greg.Bittar@sherwiniron.com.au
Location	475 kms southeast of Darwin and 120 kms east of Mataranka
Description	Development of new iron ore mine and new iron ore province. Open cut and surface strip mining. Direct Shipping Ore and beneficiated ore to be trucked to the north south rail and exported through Darwin Port (approx 3Mtpa).
Product	Iron ore (Hematite)
Resource	JORC resource of 107Mt @ 47% Fe (Jan 2011). Further drilling in progress. Old BHP (non-JORC) estimates of 400Mt @ 40-64% Fe
Mine Life	Estimate 20 + years
Approvals	Feasibility Studies in progress. Notice of Intent submitted in January 2011. EIS in preparation. Mining approvals pending environmental assessment.
Schedule	Construction – 2012 Production – 2013
Jobs	Construction – unknown Production – 200
Capex	Unknown

Mine Name	TANAMI CENTRAL
Company	Tanami Gold
Contact	Graeme Sloan – Managing Director/CEO Phone: (08) 9212 5999 Email: tanamigold@tanami.com.au
Location	Approx 650 kms northwest of Alice Springs
Description	Reopen old Tanami and Groundrush mines. Open cut mining operations to extract remnant ore reserves and underground development of newly defined ore reserves. On site processing through 1.2Mtpa plant.
Product	Gold
Resource	21.3Mt @ 3.0 g/t Au
Mine Life	TBA
Approvals	Development proposals yet to be submitted. Feasibility study in progress based on 1.2Mtpa treatment facility.
Schedule	Construction – TBA Production – TBA
Jobs	Construction – unknown Production – unknown
Capex	Unknown

Mine Name	MOLYHIL
Company	Thor Mining PLC
Contact	Ian Sheffield-Parker – Chief Operating Officer Phone: (08) 7123 4050 Email: isheffieldparker@thormining.com
Location	220 kms northeast of Alice Springs
Description	Proposed open pit and underground mining operation with on site processing by magnetic separation and flotation to produce W and Mo concentrate.
Product	Tungsten and Molybdenum concentrates
Resource	3.73Mt at 0.51% combined WO ₃ and MoS ₂
Mine Life	Initially 5 year
Approvals	Environmental – July 2007 Mining – pending New development proposals expected in early 2012.
Schedule	Construction – TBA - Subject to project finance and metals prices
Jobs	Construction – 100 Production – 70
Capex	\$71M (in 2007)

Mine Name	MOUNT PEAKE
Company	TNG Limited
Contact	Paul Burton – Managing Director Phone: (08) 9327 0900 Email: peb@tngltd.com.au
Location	235 kms north of Alice Springs
Description	Scoping Study undertaken and Pre-feasibility Study in progress. New hydrometallurgical extraction process developed. Pilot plant metallurgical testwork to be undertaken in 2011. Full Feasibility Study in 2012 with development decision by end 2012.
Product	Vanadium Titanium & Iron
Resource	140Mt @ 0.3% V ₂ O ₅ , 9% TiO ₂ , 35% Fe
Mine Life	Approx 24 years
Approvals	Development proposals yet to be submitted.
Schedule	Construction – 2013 Production -2014
Jobs	unknown
Capex	\$370M (Stage 1)

Mine Name	MT TODD
Company	Vista Gold Australia Pty Ltd
Contact	Ray Iacono – Project Development Manager Phone: (02) 9327 4600 Email: riacono@vistagoldaustralia.com.au
Location	250 kms south of Darwin and 55 kms north of Katherine
Description	Reopen the Mt Todd Gold Mine. Conventional open pit mining extracting up to 10.65 million tonnes per annum of ore for on site processing through newly constructed CIL Plant. Using existing facilities and new power plant.
Product	Gold dore (250,000 ozs pa)
Resource	5.98 million ozs of measured and indicated mineral resources and 2.61 million ozs of inferred mineral resources
Mine Life	15 years
Approvals	Environmental – in progress Mining – pending enviro assessment
Schedule	Construction -
Jobs	Construction – 400 Operations – 300
Capex	TBA

Mine Name	ROPER BAR IRON ORE
Company	Western Desert Resources
Contact	Norm Gardner – Managing Director Phone: (08) 8388 3012 Email: norm@westerndesertresources.com.au
Location	Approx 540 kms SE of Darwin, 350 kms ESE of Katherine and 40 kms from the Gulf of Carpentaria.
Description	Open cut mining of ore with on-site beneficiation. Ore will be transported via an iron ore concentrate slurry pipeline to a load out facility for export vessels in the Gulf of Carpentaria. Production ramping up to 10Mtpa.
Product	Iron Ore (Hematite)
Resource	311Mt @ 40% Fe (includes 9.8Mt @ 58.3% Fe and 4.7Mt @ 55.6% Fe). Further resource drilling to be undertaken. Refer to website for details.
Mine Life	40 years +
Approvals	Feasibility studies in progress. Development proposals submitted in June 2011. EIS in preparation. Mining approvals pending environmental approvals.
Schedule	Construction – 2012/13 Production – 2013/14
Jobs	Construction – 125 Production – 70
Capex	Unknown

Mine Name	ROVER PROJECT
Company	Westgold Resources
Contact	Scott Huffadine – Managing Director Phone: (08) 9326 5700 Email: shuffadine@westgold.com.au
Location	Approx 1100 kms S of Darwin and 80 kms SW of Tennant Creek
Description	Development of new underground mine and possible new mineral field. Further drilling being undertaken and various feasibility studies in progress. Development proposals yet to be submitted.
Product	Gold and Copper (IOCG)
Resource	5.3Mt @ 6.1 g/t AuEq (Maiden resource announced)
Mine Life	Undetermined
Approvals	Further drilling being undertaken. Feasibility studies in progress. Development proposals yet to be submitted
Schedule	Unknown
Jobs	Unknown
Capex	Unknown

Mine Name	McARTHUR RIVER MINE EXPANSION
Company	Xstrata Zinc
Contact	Brian Hearne – Chief Operating Officer Phone: (07) 3295 7586 Email: bhearne@xstratazinc.com.au
Location	Approx 900 kms southeast of Darwin
Description	Proposed expansion of operations at the existing McArthur River Mine. The proposal involves increasing MRM mine production to approx 5 million tonnes per year (2.2 million in 2010) and upgrading the process plant, resulting in an increase in bulk zinc/lead concentrate volume to 800,000 tonnes per year (384,000 in 2010).
Product	Zinc/lead concentrate.
Resource	115 Mt
Mine Life	Extend life of mine by 6 years to 2033.
Approvals	Development proposals (NOI) submitted in March 2011 Environmental – pending Mining – subject to enviro approval
Schedule	Subject to approvals
Jobs	Construction – 900 Production – 550 (110 increase from current)
Capex	Indicative \$270M

