

Little-known company targets South African biodiversity hotspot for mining

- *South Africa's remote, semiarid Northern Cape province risks environmental damage by an inexperienced mining company that wants to prospect for the minerals critical for the renewable energy sector.*
- *Environmentalists have drawn attention to the "exceptionally poor" impact assessment studies, suggesting a lack of planning and consideration that heightens the risk of impacts on the environment and local communities.*
- *The potential impacts include groundwater contamination in a water-scarce region and the risk of radioactive dust polluting the soil and water sources.*
- *The company that's applied to prospect seven tracts of land in the province only registered as a business in 2023 and has no public track record as a mining company.*

A slew of applications by a little-known mining group to explore for critical minerals in South Africa's Northern Cape province, including within the buffer zone of a nature reserve, has alarmed environmental groups and activists. They warn that the remote and water-scarce region, a globally significant biodiversity hotspot with unique ecosystems and exceptional plant diversity, risks being treated as barren desert.

The seven applications from Johannesburg-based Umboso cover a range of minerals considered critical for manufacturing renewable energy components, including cobalt (essential for making lithium-ion batteries), iron ore (used in steelmaking), gallium and germanium (used in making solar panels and cells), uranium, and rare earths needed to make magnets for wind turbines.

Prospecting for these minerals could turn the Northern Cape into a "Wild West" for extractive industries, said [Liziwe McDaid](#), strategic lead at the environmental justice organization Green Connection, which has brought several successful court cases against mine prospecting elsewhere in the country.

The Umboso Group, which only registered as a company in 2023 and does not publicly list any previous mining experience, applied in February to prospect on seven tracts of land in the Northern Cape — in one case inside the 5-kilometer (3-mile) buffer zone of Gamsberg Nature Reserve, which was set up to safeguard the Nama Karoo and Succulent Karoo biomes.



A springbok (Antidorcas marsupialis) in Tswalu Kalahari Reserve, Northern Cape province. Image by Charles J. Sharp/Sharp Photography via Wikimedia. CC BY-SA 4.0.

[Thevha Sustainable Services](#), an environmental impact consultancy also based in Johannesburg, was hired by Umboso to carry out the scoping reports it needed to apply for the exploration licenses.

To prospect for minerals in and around Gamsberg Nature Reserve Umboso has asked for permission to dig 20 huge pits and spend four to eight months drilling 150 reverse circulation boreholes, according to the [scoping report](#). These are designed to pump air underground to bring rock to the surface for [mineral testing](#).

Wendy Pekeur, director of the Western and Northern Cape-based [Ubuntu Rural Women and Youth Movement](#), which works with rural women to build leadership in farming, mining and fishing communities, said that, in general, prospecting boreholes always carry a risk of contaminating valuable groundwater resources. In a drought-stricken province where aquifers are the only water source for more than [465,000 people](#), this could be disastrous.

Documentation submitted for the proposed exploration in Gamsberg reveals troubling oversights.

Pekeur said the Gamsberg scoping report doesn't place enough emphasis on the fact that they would be operating in a water-scarce region. The document says the water needed for prospecting (in the drilling, processing, separation and treatment of minerals, and to meet the needs of mine workers) will be purchased from nearby farm owners or the local municipality.

"The Northern Cape is the hottest, driest province in South Africa. We've previously seen how mines use so much water that residents are left with nothing," she told Mongabay.

Gwendolyn Wellman, an independent social impact assessor working in the extractive sector, reviewed the Gamsberg scoping report and described it as “exceptionally poor quality.”

“If accepted by the government, it indicates that this area of the country will become a sacrifice zone and its population will bear disproportionate environmental and social costs so that others can benefit,” she said.

This is because South African mining companies stand to make huge profits from exporting these minerals to industries overseas that rely on a constant flow of critical minerals like zinc, manganese, lithium and platinum to manufacture solar components, electric vehicle batteries and large battery storage systems.

Because Umbose will also be searching for radioactive uranium, thorium and monazite among the target minerals, the scoping report says it will be necessary to conduct a radioactivity impact assessment.

“For the community of [Aggeneys town](#) living 7 km [4 mi] from the site, with prevailing winds in an arid landscape, radioactive dust and contamination risk deserves far more prominence in the community impact analysis than it receives in this document,” Wellman said.



Some of the Northern Cape's indigenous succulent plants, which are found nowhere else on the planet. Image by Martin Heigan via [Flickr](#) (CC BY-NC-ND 4.0).

The Gamsberg scoping report says that once prospecting is finished, it will take just one month for the mining company to “restore the land” by refilling the huge pits with the dug-up material and maybe planting new bushes and shrubs.

But McDaid said this is impossible. “The Northern Cape is a fragile and very important ecosystem. This kind of damage will be long lasting. When mining companies say ‘This region is just a dry desert, not really a critical area for communities or biodiversity, and it’s OK to mine it,’ that’s simply not the case,” she said.

These biomes are “home to at least 6,000 species of plants that have evolved over millennia to survive the desert’s aridity, many of them rare,” according to the website of the Minerals Council of South Africa, which represents mining companies.

The scoping report concedes that the area is made up of the Aggeney’s Gravel Vygieveld, a unique vegetation type with specialized, rare and endemic succulent flora that thrive on gravel-covered plains.

In a prepared statement, the nonprofit [Protect the West Coast](#) also criticized the attempt by Umboso to open up this ecologically sensitive area to mining, saying its applications show a lack of proper planning. It noted that to rehabilitate the land near Gamsberg after prospecting would require the topsoil to be carefully removed and replaced, windbreaks and nets set up to prevent soil erosion, and for Umboso to source large quantities of indigenous plant seeds for replanting.



Flowers in bloom in Namaqualand, Goegap Nature Reserve in South Africa's Northern Cape province. Image by Winfried Bruenken (Amrum) via Wikimedia. CC BY-SA 2.5.

Sabelo Mnguni, national coordinator of the [Johannesburg-based nonprofit](#) Mining Affected Communities United in Action (MACUA), told Mongabay that his organization also opposes the mining applications because Northern Cape communities traditionally use communal land for grazing and gathering indigenous plants. “Once the communal

land is being drilled and blasted and destroyed by dust, the communities find it very hard to get any recourse or compensation. Communities are just pushed out to the peripheries," he said.

In South Africa, all mineral rights are owned by the state. Mining companies do not generally need consent from communities to mine their land, except where people hold informal or customary rights to the land under the 1996 Interim Protection of Informal Land Rights Act. The 2002 Mineral and Petroleum Resources Development Act says mine developers must hold meaningful public participation discussions with affected people before prospecting for minerals.

But Mnguni pointed out that mining companies elsewhere in the country had circumvented community consultation by getting permission to prospect directly from the communal property association or municipal officials, who have rights over communal land.

Umbose's listed contact person, Bafri Anat, did not reply to requests for an interview, and neither did Thevha Sustainable Services.

Banner Image: *The town of Aggeneys in Northern Cape province lies close to the mining area. Image courtesy of Northern Cape Tourism.*

FEEDBACK: Use this [form](#) to send a message to the author of this post. If you want to post a public comment, you can do that at the bottom of the page.

