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3 April 2024

Prefeasibility Study advancing with +30,000m drilling completed

Highlights:

- **To date over 30,000m of diamond drilling has been completed, consisting of 79 mother holes and 48 deflections.**
- **Recent drilling has targeted the North Horst Block to get a better understanding of that area for the forthcoming PFS and potentially convert more of the Inferred resource to Indicated status.**
- **Results for the final drill holes will be incorporated into an updated Mineral Resource estimate, which is scheduled for completion in early Q3 CY2024.**
- **Updated Mineral Resource estimate and maiden reserve will form part of the Prefeasibility Study (PFS) which is scheduled for completion early Q4 CY2024.**
- **SRK Consulting has been commissioned to review ongoing PFS work to ensure the highest standards of due diligence and quality assurance.**
- **Environmental Impact Assessment (EIA) remains underway and is advancing on schedule, with submission slated for mid-2024.**
- **SPD remains well funded to complete the PFS from existing cash reserves, with a cash position of $8.34m as at December 31, 2023.**

Southern Palladium (ASX:SPD and JSE:SDL), 'Southern Palladium' or 'the Company') is pleased to provide an update on development works that will be incorporated into the forthcoming Pre-Feasibility Study (PFS) for the Company's Bengwenyama Platinum Group Metal (PGM) project, on the Eastern Limb of the world class Bushveld Complex, South Africa. Notably, it is strategically positioned in the heart of a significant underground mining region, leveraging existing infrastructure and knowledge for operations. An extensive Scoping Study for Bengwenyama by Johannesburg-based mining consultancy Minxcon (Pty) Ltd earlier this year (*refer ASX Announcement 1 February 2024*) confirmed the continuation of the PFS.

A summary of key results from the Scoping Study are set out below:

- Life of Mine (LOM) on the UG2 reef only is estimated at 36 years for an average annual production rate of 330 Koz PGM (6E basis) with cash costs firmly at the low end of the global cost curve.
- Development of a shallow underground mining operation targeting the ~2 Mtpa UG2 reef via decline systems, employing a hybrid mining method commonly utilised in neighbouring mines.
- The mill feed is characterized by a head grade of 6.55g/t (7E). Processing will involve conventional flotation and spiral plant techniques to produce a marketable PGM concentrate with an anticipated recovery rate of approximately 85% for the major metals. Additionally, a chrome concentrate will be produced for sale in export markets.
- Initial capital spend of ~US$408m.
- Post-tax NPV of ~USD700 million based on conservative commodity price assumptions (Pt US$1200/oz, Pd US$1100/oz, Rh US$5000/oz).
- Post-tax IRR of ~21% with post-tax capital payback of ~4.5 years from first concentrate production.
- Life of mine EBITDA totalling ~US$5.2 billion.

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Managing Director Johan Odendaal, said: *"With over 30,000m of drilling completed, we are now transitioning towards the completion of a PFS. Notably, the initial target area in Eerstegeluk has been successfully converted to Indicated Mineral Resources by the end of 2023, marking significant progress. With assay results for the North Horst Block still pending, the project already boasts an existing Indicated and Inferred Mineral Resource Estimate of 26.22Moz (6PGE+Au). To ensure the utmost standards of due diligence, the Company enlisted SRK Consulting to conduct a comprehensive review of our ongoing work, fostering transparency and independence in the project development process. SPD remains well-funded to see the PFS through to completion early in the fourth quarter of 2024. The Environmental Impact Assessment, a core component of the forthcoming Mining Right application, is also progressing well and remains on schedule to be submitted for review by mid-2024."*

PFS Update

Drill programme

To date over 30,000m of diamond drilling has been completed, consisting of 79 mother holes and 48 deflections, 12 boreholes and 19 deflection more since the resource was updated in December. As the PFS exploration phase comes to an end, the main activities at the Bengwenyama project have now moved to the completion of the PFS and the Environmental Impact Assessment as part of the Company's forthcoming Environmental Impact Report (EIR) submission for the granting of the Mining Right.

The initial target area in the shallow portion of Eerstegeluk has been successfully converted to Indicated Mineral Resources by the end of CY2023. The recent drilling has targeted the North Horst Block to get a better understanding of that area for the forthcoming PFS and potentially convert more of the Inferred resource to Indicated status.

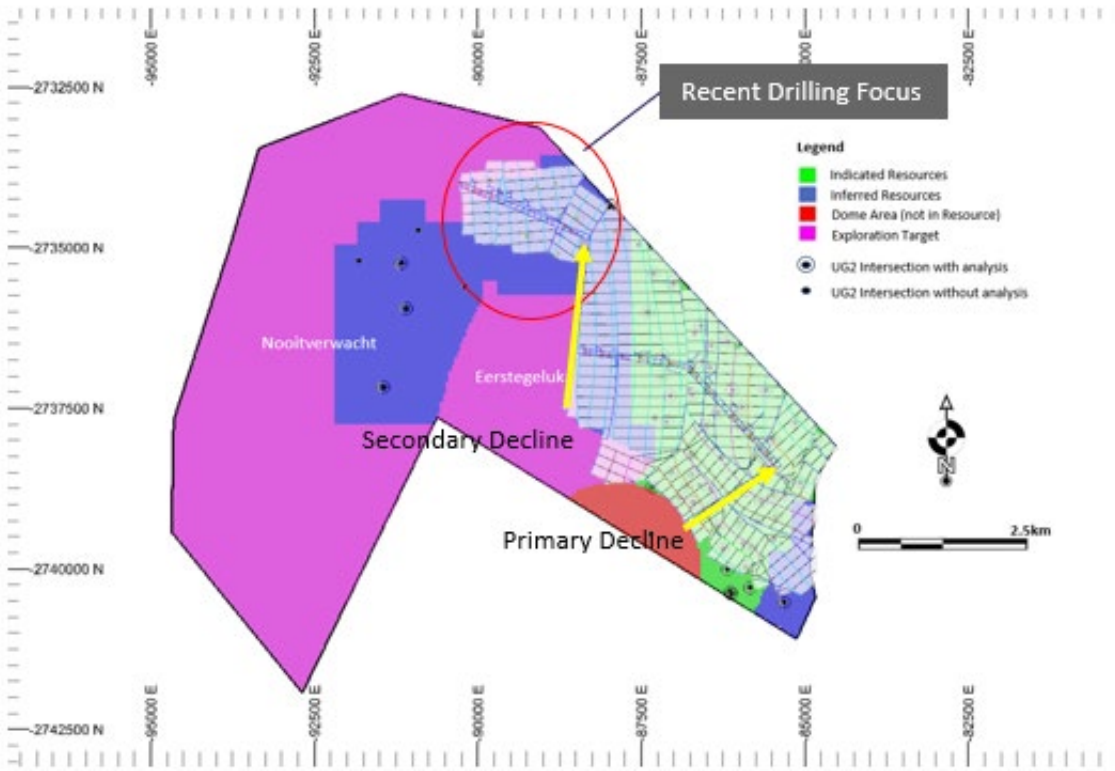


Figure 1: Recent North Horst Block Drilling Target.

The final assays will be submitted in April, with the receipt of all assays then expected by the end of May. The resource already contains an Indicated and Inferred Mineral Resource Estimate of 26.22Moz (6PGE+Au) (*refer ASX Announcement 7 December 2023*).

Following receipt of all assays, an updated Mineral Resource estimate – integrating the findings from the final holes drilled for the PFS phase – is scheduled for completion early in the September quarter.

Metallurgy

Concurrent with the completion of the PFS drill program, comprehensive metallurgical and geotechnical test work remains ongoing. Additional test work has been designed to increase confidence in the metallurgy process flowsheet and make improvements to both recovery and grade of the 7E PGM content from the UG2 reef.

Preliminary testing indicated that the Bengwenyama UG2 Reef can be treated using conventional methods, and initial test works showed outstanding metallurgical recoveries of between 85% and 80% with concentrate grades of 130 to 250g/t (4E) can be obtained (*refer ASX Announcement 6 December 2023*).

Offtake

The Scoping Study identified that there is a well-established downstream smelting and refining process for PGM concentrates within South Africa. Well-established precedents exist for commercial terms that would be applicable for UG2 and Merensky concentrates. Most smelters processing the concentrate from the Eastern and Western Limbs are situated in Rustenburg, with almost all the concentrator product in the area being transported by truck to Rustenburg. The Project PGM concentrates are believed to be suitable for these facilities. The recently completed Scoping Study enables the company to initiate discussions with potential offtake parties.

Community engagement

Southern Palladium continues to maintain strong engagement with the Bengwenyama community through direct consultation and inclusion initiatives.

Alongside ongoing drill works and project development, weekly exploration meetings are held with representatives of the Community along with Minxcon Pty Ltd, the environmental and exploration management consulting firm contracted to the project. Quarterly meetings are also held with extended representation from the greater Royal Family, Traditional Council and community representatives.

Environmental Impact Assessment

The acceptance letter for the Mining Right Application, received on 17 October 2023 marked the commencement of the Environmental Authorisation process comprising the Scoping and Environmental Impact Assessment (EIA) reporting phases. The scoping phase was concluded with the receipt of the acceptance letter on 15 February 2024, initiating the subsequent EIA phase.

This process entails ongoing consultation with local authorities and engagement with interested and affected parties. It also involves conducting specialist studies by independent experts and the eventual compilation of the comprehensive Environmental Impact Report (EIR) by the independent environmental consultancy, OMI Solutions (Pty) Ltd. This report will delineate all biophysical and socio-economic impacts, along with proposed mitigation measures and the Environmental Management Programme (EMPR). The final EIR, encompassing all findings and the EMPR, is anticipated to be submitted to the Department of Mineral Resources and Energy (DMRE) for review by mid-2024.

SRK Review of the PFS

To ensure the highest standards of due diligence and quality assurance throughout the project lifecycle, SPD has enlisted SRK Consulting (South Africa) (Pty) Ltd (SRK) to conduct a comprehensive assessment and review of the ongoing work pertaining to the Mineral Resource estimation and Pre-Feasibility Study (PFS).

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The review process entails interactive sessions between various SRK discipline consultants and representatives of Minxcon Pty Ltd, which is conducting the PFS, to ensure the early identification of potential challenges that may impact the final PFS outcome.

Funding of the PFS

Southern Palladium remains well funded to complete the PFS, with A$8.34 million in cash as at 31 December 2023 (*refer ASX Announcement 29 February 2024*). Consistent with previous guidance, the PFS is expected to be completed early in the December quarter.

This announcement has been approved for release by the Board of Southern Palladium Limited.

About Southern Palladium:

Southern Palladium Limited (ASX: SPD, JSE: SDL) is a dual-listed platinum group metals (PGM) company focused on advancing the Bengwenyama PGM project, located in South Africa. This project, situated on the Eastern Limb of the Bushveld Complex, boasts a rich abundance of platinum, palladium, rhodium and other minor metals which are key components in the PGM market. The Bushveld Complex is renowned for hosting over 70% of the world's known PGM resources, making Bengwenyama strategically positioned for significant development.

With a 70% ownership stake in the project, the company's primary objective is to advance the Pre-Feasibility study. Additionally, key milestones include the completion of a geophysical survey, completed in 2022 and the submission of a Mining Right application in September 2023.

A diamond drill programme was initiated in August 2022 alongside various concurrent technical studies which will be incorporated into the PFS phase in 2024. Bengwenyama represents a compelling opportunity in the global PGM market. Previous exploration endeavours have already resulted in the delineation of a JORC 2012-compliant Inferred Mineral Resource of 26.2 million ounces across two ore horizons—the UG2 chromitite and Merensky Reef—reported at the end of 2023. Furthermore, a comprehensive assessment conducted by mining industry consultants CSA Global in 2021 has identified a significant exploration target beyond the current exploration area.

Guided by a seasoned management team with extensive on-ground experience, including notable figures from South Africa's mining industry, Southern Palladium Limited is poised to unlock the full potential of the Bengwenyama project and deliver substantial value to its stakeholders.

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