# Viridis Achieves Critical Environmental and Regulatory Milestones

**ASX Release: 28 January 2025**

## Highlights

- **Viridis has submitted a comprehensive Environmental Impact Assessment ('EIA') and Environmental Impact Report ('RIMA') as part of its application for a Preliminary License ('PL'), the first of a three-step Environmental Approval Process.**

- **The EIA / RIMA has been lodged with the Environmental Agency of Minas Gerais ('FEAM') for the proposed Colossus Rare Earth Project, covering the tenements that make up its Northern Concessions in the Municipality of Poços De Caldas.**

- **The submission of the EIA / RIMA reports has been a mammoth undertaking and the culmination of 8 months of thorough environmental assessment including fieldwork to assess and collect flora, fauna, water, air quality, noise, and vibration measurements, plus comprehensive community surveys, dynamic modelling, and engineering studies.**

- **Following a thorough investigation and consultation with government officials and specialist environmental consultants soon after project acquisition, Viridis strategically selected the Municipality of Poços De Caldas, due to its strong support of the project, and ensuring the shortest pathway to production. Hence the EIA / RIMA is focused on the production facility and initial mine plan being based on the Northern Concessions, which is located within the Poços De Caldas jurisdiction.**

- **This decision has been vindicated by receiving key municipal endorsement at an early stage, which reflects a significant step forward in the licensing process and underscores the strong support for the project from the local government.**

- **The municipal endorsement has been received via the issuance of the Certificate of Regularity for Land Use and Occupation from the Municipality of Poços De Caldas ('Certificate'). This certificate enables the development of the Colossus Rare Earth Project, covering the National Mining Agency ("ANM") processes N. 009.031/1966, N. 830.113/2006, N. 007.737/1959, and N. 830.927/2016, the four tenements which form the Northern Concessions.**

- **The Certificate of Regularity for Land Use and Occupation is a pre-requisite required for the approval of the PL as legislatively mandated in State Decree No. 47,383/2018, Article 18, §1. As the PL must demonstrate full compliance with municipal legislation and align with the urban planning framework of Poços de Caldas, this certificate is the most important document required for the licensing process and certifies the environmental feasibility and credentials of the Colossus Project.**

- **With the unwavering support from our state and local government representatives, the environmental permitting process for Colossus remains on track to receive approval for the Installation License ('IL') and commencement of construction in Q3 2026, in line with the Memorandum of Understanding from both the State Government of Minas Gerais and the Municipality of Poços De Caldas[1].**

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### *Chief Executive Officer, Rafael Moreno commented:*

***"What a fantastic achievement, and further endorsement of the strategy to build the Colossus Project in the Municipality of Poços De Caldas. This marks a significant milestone in the development of our project and demonstrates our commitment to sustainable and responsible mining practices.***

***With the environmental approvals forming the critical path of the project, the submission of a comprehensive EIA / RIMA and receiving the formal Certificate from the Municipality of Poços De Caldas, is a huge step in de-risking our timeline to production.***

***It has been impressive watching and being a part of a team so committed to identifying all potential environmental impacts, no matter how small, and developing robust mitigation measures, ensuring that Colossus complies with all regulatory frameworks and best-in-class practices, to ensure we preserve one of Brazil's most vital ecosystems.***

***With the groundbreaking updated resource estimate released recently and industry-leading mixed rare earth carbonate ('MREC') recoveries, investors understand the exceptional potential of the Colossus Project and should now also be thrilled with the progress being made with the environmental approvals and support we are receiving from the state and local governments."***

Viridis Mining and Minerals Limited ('Viridis' or 'Company') is pleased to report that it has achieved a significant set of milestones in the environmental approval process for the Colossus Project and just as importantly it has attained the single most difficult approval to accomplish from the Municipality of Poços De Caldas to build and operate the project at its Northern Concessions.

## Environmental Approval Process

The Colossus EIA was prepared by **CLAM Ambiente** with the support of **Alger Consultoria**. The study confirmed that, based on the proposed activities and project area, the environmental licensing process will proceed at the state level, as required by legal provisions. This approach significantly reduces both the complexity and the timeline for obtaining regulatory approvals.

The licensing process involves 3 stages under state regulations:

1. **Preliminary License (PL):** This certifies the environmental feasibility of the project's design and location and outlines basic requirements and conditions for the next phases.
2. **Installation License (IL):** Authorises project construction based on approved plans, programs, and projects, including necessary environmental controls.
3. **Operation License (OL):** This license grants permission to operate after confirming compliance with PL and IL requirements, environmental controls, and, if needed, deactivation conditions.

The PL submission was completed as per the Colossus development timeline, reflecting the Company's commitment to adhering to its development schedule. This milestone keeps the Colossus Project on track to achieve subsequent licensing stages, ensuring operations can commence as planned by end of 2027. This timely progress underscores the project's robust planning and alignment with regulatory requirements.

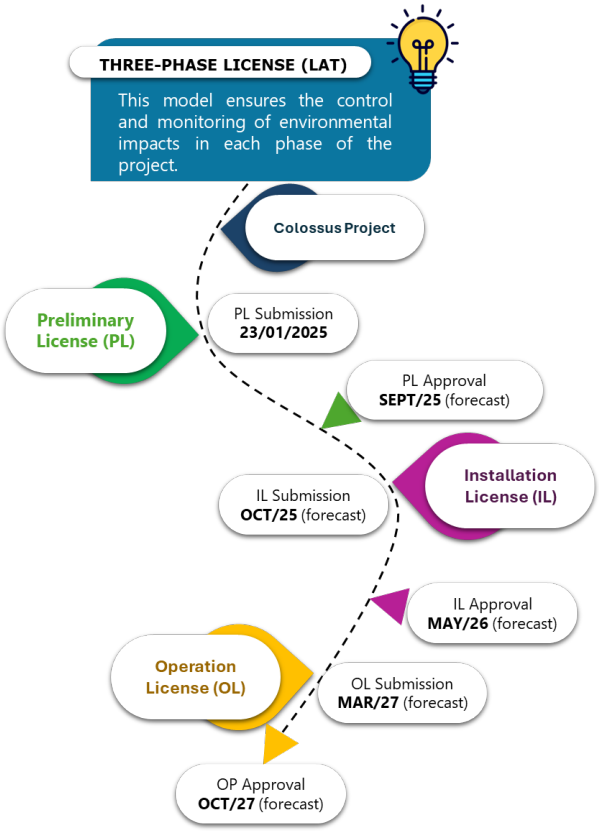


**Figure 2:** *Three-Phase Licensing Timeline for the Colossus Project, outlining key milestones for Preliminary, Installation, and Operation Licenses, with approvals forecasted from 2025 to 2027.*

## Colossus – A Strategic Location

Following a thorough investigation and consultation with government officials and specialist environmental consultants soon after project acquisition, Viridis strategically selected the Municipality of Poços De Caldas, as the de-risked and shortest pathway to production and hence the EIA / RIMA is focused on the production facility and initial mine plan being based on the Northern Concessions as per Figure 2.

The Directly Affected Area ('ADA') forms the basis of the EIA / RIMA and encompasses the combined areas of the mining pits, industrial plant, stockpile yard, and vehicle access routes.

This decision to build the Colossus production facility and commence initial mining in the Municipality of Poços De Caldas has been vindicated by receiving the **Certificate of Regularity for Land Use and Occupation** at such an early stage, reflecting a significant step forward in the licensing process and underscoring the strong support for the project from the local government.

As per the contract with Alger, once the Operational License is approved for the Northern Concessions, Viridis will apply for mining approval for its Southern Complex. The expectation from Alger, based on current project benchmarks, is that Viridis will attain the License to mine for its Southern Complex within ~12 months.

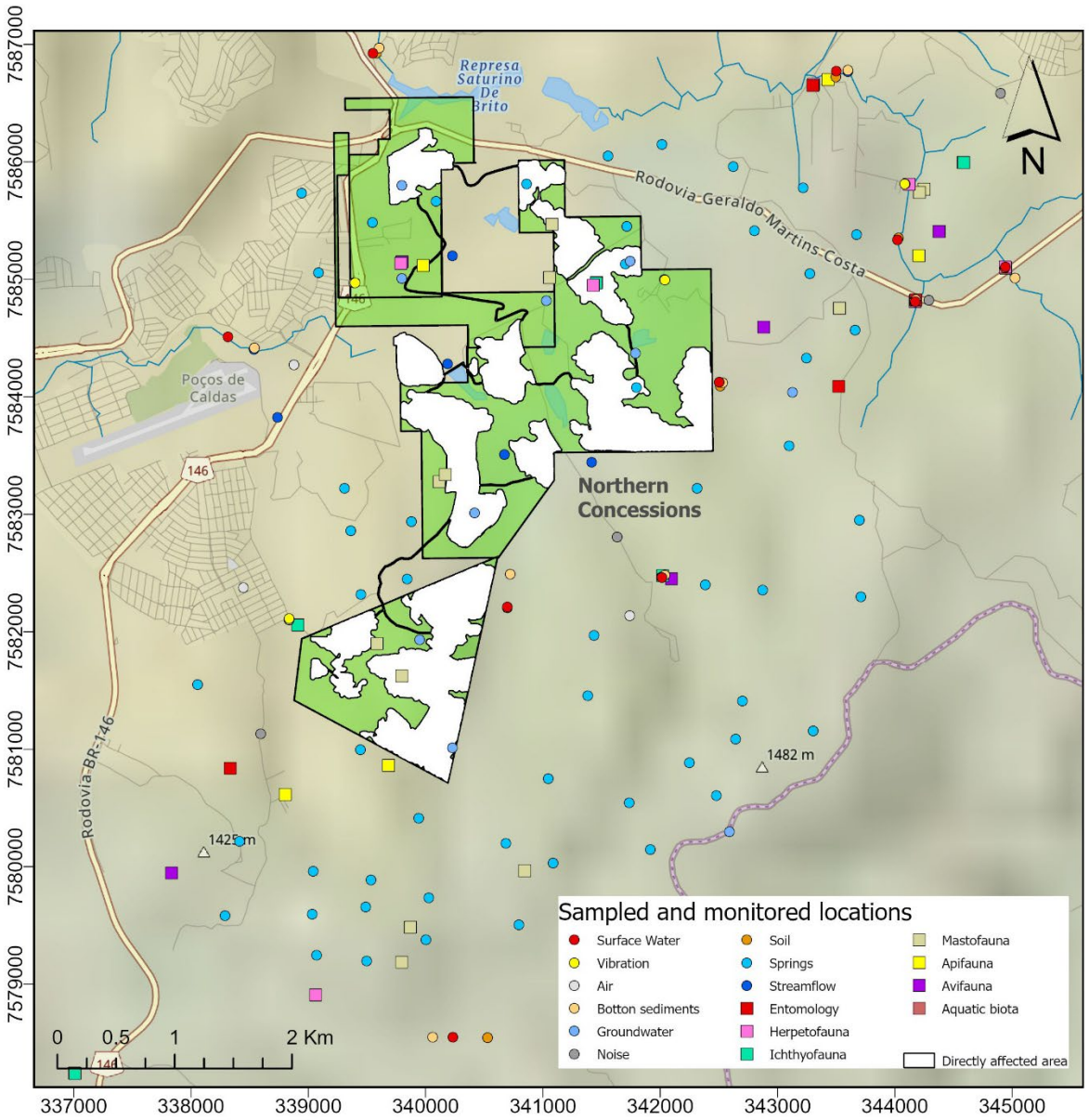


**Figure 2:** *Map showing the Colossus Project's Northern Concessions and extensive fieldwork to assess and collect flora, fauna, water, air quality, noise, and vibration measurements.*

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### *Environmental Studies and Regulatory Advancements*

As part of the licensing process, Viridis has completed a comprehensive **EIA** and **RIMA** for the Colossus Project, which aligns with state regulatory requirements. These studies involved extensive fieldwork and technical evaluations to assess the project area's physical, biological, and socioeconomic characteristics, ensuring a thorough understanding of the environment.

The EIA provides a foundation for regulatory review and demonstrates the project's alignment with environmental best practices and sustainability goals. Key aspects of the assessment include:

- **Extensive Fieldwork:** Data collection on flora, fauna, water resources, air quality, noise, and vibration.
- **Community Engagement:** Surveys and consultations to incorporate local insights into the assessment process.
- **Locational Feasibility Analysis:** Evaluation of multiple site alternatives for infrastructure, such as the Mineral Treatment Unit ('MTU') and waste storage areas, ensuring optimal alignment with environmental and operational objectives.
- **Dynamic Modeling:** Advanced simulations to assess potential interactions between project activities and the surrounding environment.
- **Technical and Engineering Studies:** Integrating sustainable design principles to minimise environmental impact.

The completion of the EIA marks a significant step in the environmental approval process and positions the Colossus Project as a responsible and sustainable initiative.

Viridis is thankful for the unwavering support from our state and local government representatives, as the environmental permitting process for Colossus remains on track to receive approval for the Installation License and commence construction in Q3 2026, in line with the Memorandum of Understanding from both the State Government of Minas Gerais and the Municipality of Poços De Caldas.

### *Director of Investment Attraction at Invest Minas, Ronaldo Barquette commented:*

***"The State of Minas Gerais reaffirms its commitment to supporting the Colossus Project, recognising its strategic importance and significant contribution to the state's economic development. Following productive discussions with representatives from Viridis, the State acknowledges the alignment of the Colossus Project with the socio-economic interests of local communities, further strengthening its value as a transformative initiative for the region.***

***In line with the commitments established in the Memorandum of Understanding signed in March 2024, the State of Minas Gerais, through Invest Minas, reiterates its readiness to actively collaborate with Viridis in securing the necessary approvals for environmental licensing. This includes facilitating the processes required for the construction and operation of the Colossus Project, ensuring adherence to both local and international environmental standards.***

***By continuing this partnership, Minas Gerais underscores its dedication to fostering sustainable and responsible development, positioning the state as a global leader in strategic and innovative projects."***

## Certificate of Regularity for Land Use and Occupation

Viridis is pleased to announce that it has secured the critical **Certificate of Regularity for Land Use and Occupation** from the Municipality of Poços de Caldas. This milestone approval underscores the Colossus Project's readiness to advance through the licensing phases and reflects strong support from local authorities.

The certificate, issued by the Municipality, is a legal pre-requisite as mandated in State Decree No. 47,383/2018, Article 18, required by FEAM to issue the Preliminary License. The Certificate approves the activities listed below, covering the four ANM processes N. 009.031/1966, N. 830.113/2006, N. 007.737/1959, and N. 830.927/2016, which form the Colossus Project Northern Concessions.

a) Code: A-02-01-1 - Open-pit mining - Metallic minerals, except iron ore

b) Code: A-02-07-0 - Open-pit mining - Non-metallic minerals, except ornamental and coating rocks

c) Code: A-05-02-0 - Mineral Treatment Unit - UTM, with wet treatment

d) Code: A-05-04-5 - Reject/waste piles

e) Code: A-05-06-2 - Disposal of inert and non-inert waste or mining waste (class II-A and IIB, according to NBR 10.004) in a mine pit, on a temporary or permanent basis, without the need to build a containment dam

f) Code: F-06-01-7 - Retail stations, fueling stations or points, retail system installations, floating fuel stations and aviation fuel reseller stations

Viridis is proud to have received this Certificate, which reflects its commitment to municipal regulations, urban planning guidelines, and responsible development. This achievement reinforces the Colossus Rare Earth Project's dedication to sustainability and collaboration with local authorities, enhancing the project's credibility, reducing risks, and paving the way for smooth progression toward full environmental and operational licensing.

***Secretary of Economic Development and Labor of the Municipality of Poços De Caldas, Franco Martins commented:***

***"We are pleased to declare our institutional support for the Colossus Project, recognising its strategic importance for the future of our municipality and its contribution to the local economy.***

***Following discussions with Viridis representatives, we consider that the establishment of your production unit aligns with our community's socio-economic development interests.***

***This site has been carefully evaluated and meets the necessary conditions to responsibly and sustainably enable the enterprise, leading to the issuance of the Certificate of Activity Compliance regarding Regularity of Land Use and Occupancy in accordance with current municipal laws.***

***We want to reiterate our confidence that the municipality is prepared to actively collaborate in obtaining the necessary approvals for environmental licensing for the construction and operation of the project, as outlined in the Memorandum of Understanding signed in March 2024."***

## Sustainable Extraction and Processing of Ore

The Colossus Project utilises a **straightforward and sustainable extraction and beneficiation process** to minimise environmental impact and optimise resource use. This method ensures efficient recovery of rare earth elements ('REEs') while generating minimal inert waste.

**Key Features of the Process:**

- **Selective Extraction:** Mining operations are confined to mineralised zones, reducing unnecessary excavation and preserving surrounding areas.
- **Chemical-Free Initial Processing:** The ore is separated using physical processes, eliminating the use of reagents in the early stages.
- **Use of Reagents:** In the beneficiation stage, **ammonium sulfate** and **ammonium bicarbonate** are used as the primary reagents to produce a mixed rare earth product efficiently. These reagents are widely used and recognised for their low environmental impact.
- **Inert Waste Management:** The primary by-product of the beneficiation process is **washed residue clay**, an inert material free of harmful chemicals. This residue clay will be systematically returned to the depleted pits using the **progressive backfill method**, aiding in the rapid environmental recovery of the mining area.
- **Water Recirculation:** Advanced treatment systems ensure that **the majority of the water** used in processing is recirculated, significantly reducing water consumption and eliminating industrial effluent discharge into natural waterways.

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This streamlined process minimises environmental disturbances, ensures safe handling of reagents, and supports sustainable waste management. By returning inert materials to their original location, the project fosters ecological restoration and aligns with best practices in sustainable mining.

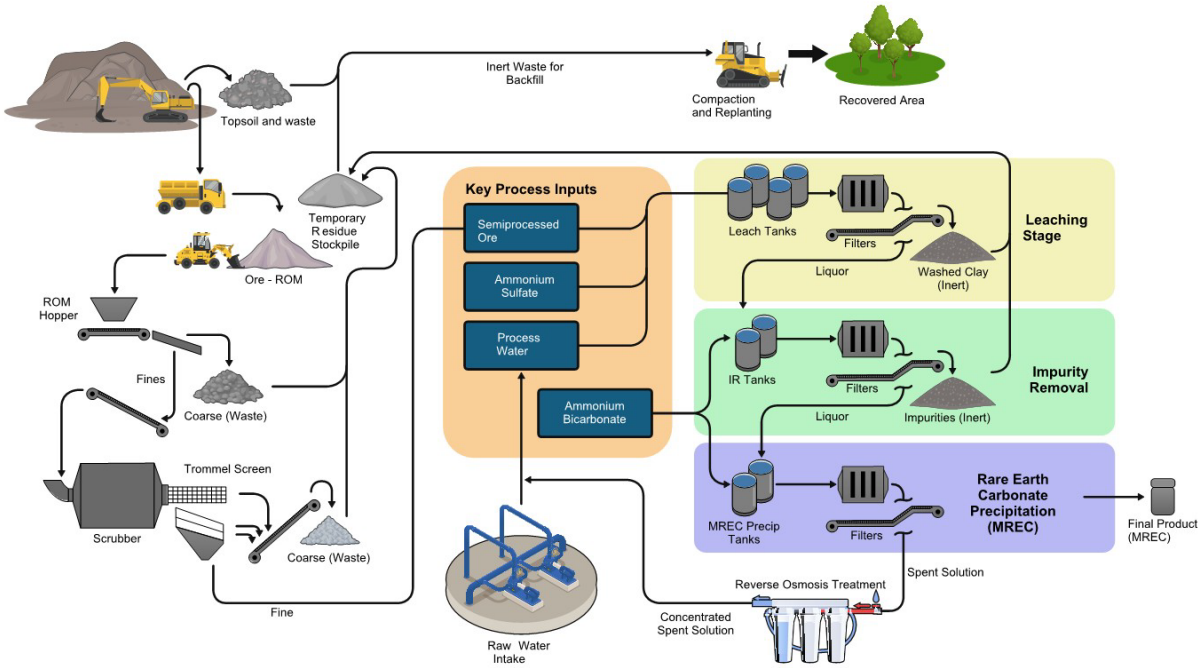


**Figure 3:** *Colossus Project Process Flow showing the sustainable process for producing MREC, including selective ore extraction, ammonium-based reagent flowsheet, water recirculation via reverse osmosis, and backfilling of inert residue ore into mined-out pits to promote environmental restoration.*

## Further Environmental Work

The Colossus Project is committed to advancing responsibly and collaboratively, prioritising transparency, community engagement, and environmental stewardship. The following steps in the licensing process will focus on fostering public participation and presenting comprehensive technical studies to the environmental authority.

- **Participatory Dialogue**: Active engagement with the community to develop the **Environmental Education Program**, promoting inclusive involvement.
- **Public Hearing and Meetings**: Transparent project presentation to ensure community understanding and support.
- **Environmental Studies**: Submit the **Environmental Control Plan**, outlining control, monitoring, and compensation measures.
- **Engineering Projects**: Presentation of detailed engineering designs for review and approval by the environmental authority.
- **Objective**: Completing these activities to secure the **Installation License** and advance the project sustainably.

## Future Work

Following the successful submission of the EIA/RIMA for the Preliminary Environmental License, Viridis is progressing several key initiatives to advance the Colossus Project:

- **Scoping Study Finalisation:** With the resource now classified predominantly as Measured & Indicated, and the detailed mine planning now completed, the Company is moving towards the completion of its Scoping Study, which will outline the project's economic and technical parameters.
- **Progress Pre-Feasibility Study:** Viridis continue to progress the detailed pre-feasibility study with Hatch, which is on track to complete end of Q2 2025.

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- **Continued Focus on Project Financing and Offtake discussions:** Armed with a globally significant Measured & Indicated resource, industry-leading metallurgical recoveries, and a cheap and environmentally friendly flowsheet, Viridis continues to progress important discussions with potential strategic off-takers and project financing options.

These activities position the Colossus Project to advance efficiently through its next development stages, maintaining its trajectory towards sustainable and responsible operations.

Approved for release by the Board of Viridis Mining and Minerals Ltd.

## Contacts

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## About Viridis Mining and Minerals

Viridis Mining and Minerals Limited is a resource exploration and development company with assets in Brazil, Canada and Australia. The Company's Projects comprise:

- The Colossus Project, which the Company considers to be prospective for Rare Earth Elements;
- The South Kitikmeot Project, which the Company considers to be prospective for gold;
- The Boddington West Project, which the Company considers to be prospective for gold;
- The Bindoon Project, which the Company considers to be prospective for nickel, copper and platinum group elements; and
- The Poochera and Smoky Projects, which the Company considers to be prospective for kaolin-halloysite.

## Forward-Looking Statements

This announcement contains 'forward-looking information' based on the Company's expectations, estimates and projections as of the date the statements were made. This forward-looking information includes, among other things, statements concerning the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions and that the Company's results or performance may differ materially. Forward-looking information is subject to known and unknown risks, uncertainties, and other factors that may cause the Company's actual results, level of activity, performance or achievements to materially differ from those expressed or implied by such forward-looking information.

## References

1. *VMM ASX announcement dated 4 March 2024 'Viridis Signs Key MOU's with State of Minas Gerais and Poços De Caldas'*

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