

TAMPAKAN COPPER-GOLD PROJECT MINE WASTE MANAGEMENT



Sagittarius Mines, Inc.'s (SMI) proposed Tampakan Copper-Gold Project involves one of the world's largest undeveloped copper-gold deposits. SMI is a contractor of the Philippine Government under the terms of a Financial and Technical Assistance Agreement (FTAA).

As a Filipino company with a commitment to the highest standards of sustainable development we have completed Environmental Impact Assessment (EIA) studies involving Filipino specialists working in conjunction with international experts.

The mine Environmental Impact Statement (EIS) has been prepared in accordance with the Philippine regulatory requirements and presents the results of the EIA studies. The EIS will support an application to the Philippine Government for the grant of an Environmental Compliance Certificate (ECC) for the Project.

In addition, we have partnered with international experts to develop a world-class Environmental and Social Impact Assessment (ESIA) report to further demonstrate that the assessment of potential environmental and social impacts has been conducted in alignment with relevant international standards.

We have thoroughly investigated ways to mitigate the potential impacts of the Project and used this information in developing our design plans reflected in our Mine Project Feasibility Study (MPFS). These plans are aligned with our major shareholder Xstrata, a global diversified mining group that is internationally recognized as a sector leader in corporate responsibility.

OUR COMMITMENT TO MANAGING MINE WASTE

We take our environmental responsibilities very seriously. As part of our commitment to sustainable mining practices we consider, at all stages of our Project planning, the potential environmental impacts of our activities and how we can mitigate them.

Effectively managing mine waste is a critically important part of our plans for the design, operation and rehabilitation of the mine and key to delivering this Project in a responsible way.

Our proposed mining operation would produce two main waste products:

- Rock from the open-pit that does not contain enough minerals to process – known as "waste rock"
- The fine grained material that is separate from the copper minerals during processing – known as "tailings"

All tailings and approximately 90% of the waste rock are expected to have the potential to produce acid drainage when exposed to oxygen and/or water. Such mine wastes are classified as potentially acid forming (PAF).

The location and design of the major mine waste storage facilities on the proposed mine site have been carefully considered to ensure their stability and to limit runoff and seepage.

The majority of the waste rock (1.35 billion tonnes) would be stored in the waste rock storage facility (WRSF). Approximately 250 million tonnes of additional PAF waste rock would be stored safely underwater in the tailings storage facility (TSF).

WASTE ROCK STORAGE FACILITY

The WRSF would occupy a footprint of approximately 500 hectares. The height of the WRSF would eventually range from approximately 70 meters to 355 meters above ground level. The WRSF would be constructed and rehabilitated progressively over the life of the mine.

Waste rock would be hauled by trucks from the open-pit to the WRSF for placement. Waste rock considered to have a high potential for acid formation would be isolated and surrounded by non-acid forming (NAF) waste rock that would:

- Limit the potential for water to come into contact with the PAF waste rock
- Minimize exposure of the PAF waste rock to oxygen.

The final surface of the WRSF would be capped with a cover layer of NAF waste rock and topsoil before being revegetated.



TAILINGS STORAGE FACILITY

The TSF would be located within the Mal River valley and would cover an area of approximately 1,300 hectares.

The TSF has been designed with a sloped embankment using a mix of clay and rock to control seepage. The embankment would be progressively raised in order to provide sufficient storage over the life of the Project and would have an ultimate height of approximately 280 meters and a crest length of approximately 2.1 kilometers.

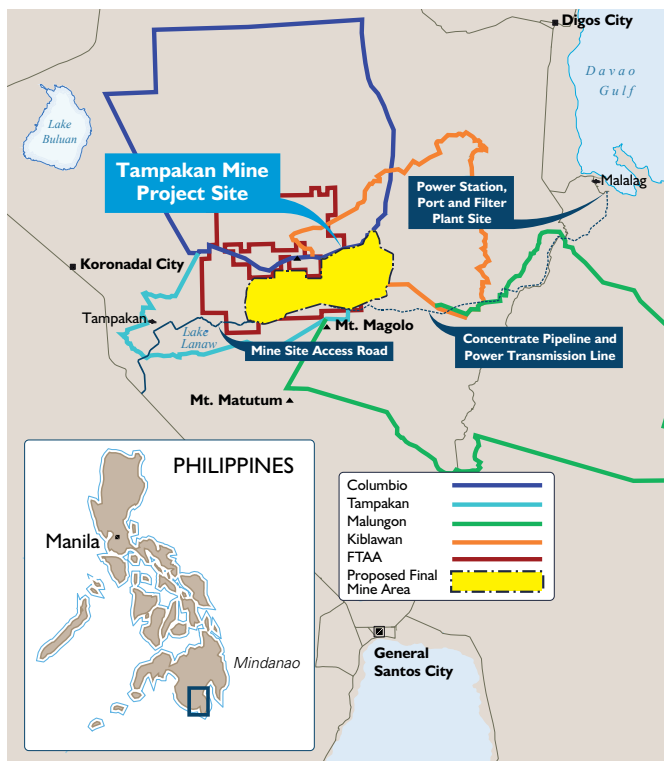
A series of diversion channels would be constructed on the north-western side of the TSF to divert fresh water around the TSF and into the Mal River. Water that is used in the mine process or comes into contact with tailings would be stored in the TSF and either recycled through the mine concentrator or treated at the TSF water treatment plant to standards that make the water safe for release into the surrounding area.

A seepage collection dam would also be located downstream of the TSF wall to collect any seepage coming through or under the TSF wall. Seepage of this kind is normal and any water collected would either be transferred back to the reclaim pond in the TSF for storage and management or treated in the TSF water treatment plant prior to release from site.

On mine closure, the water level in the TSF pond would need to be raised so the tailings are not exposed to oxygen. Any exposed areas of the tailings surface above the level of the final pond would be covered with at least one meter of NAF rock that would control potential acid generation.

Water in the TSF pond is expected to be able to be safely discharged without treatment approximately 10 years after closure. Until the water quality reaches this level, excess TSF pond water would continue to be treated in the TSF water treatment plant prior to being discharged from site.

LOCATION OF THE TAMPAKAN COPPER-GOLD PROJECT



FREQUENTLY ASKED QUESTIONS

How can you assure us that the TSF would not affect our water resources?

The storage facility is designed to achieve international criteria which meet or exceed the relevant Philippine standards. SMI has commissioned extensive technical studies on the potential impact of the proposed mine on water resources and has developed a number of measures to mitigate this potential impact, including:

- Using a water seepage collection dam and treatment facility to prevent any untreated discharge of water from the TSF and the installation of a grout cut-off curtain/wall on the eastern/southern side of the TSF
- Putting in place an extensive network of groundwater monitoring wells and systems to measure and track groundwater quality in the surrounding area
- Capturing water in the upstream freshwater dam before it comes into contact with the TSF and then releasing it to downstream users.

The TSF is designed to ensure containment of a 1:1000 rainfall event and be stable during a major earthquake.

How can you assure us that the WRSF would not affect our water resources?

Rainfall in the project would be diverted around the WRSF by perimeter drains. Water that comes in contact with waste rock in the WRSF (including seepage) is likely to be of poor quality. This water would be collected in the WRSF seepage collection dams. Water collected in these dams would be treated and then either used in the concentrator or stored in the TSF reclaim pond.

After closure, and following rehabilitation of the WRSF, surface runoff would be of suitable quality to drain from site untreated. Water that seeps through the WRSF would continue to be collected in the seepage collection dams and would be transferred to the open-pit void for storage and management.

PROJECT BENEFITS

Through sustainable partnerships, the Project can enable a better future for the people of southern Mindanao. If developed, the Tampakan Project would generate significant economic benefits that would stimulate the local, regional and national economies.

The region would enjoy substantial benefits from the mine which include:

- An annual contribution of on average PhP134 billion¹ to Philippine gross domestic product (GDP) each year over the construction and operation phases – equivalent to an additional annual increase of 1% to Philippine GDP
- Total government revenues (national and local) through a variety of taxes and charges of approximately PhP307 billion² (nominal) over the life of the Project
- Royalty payments and direct contributions in excess of PhP39.8 billion³ (nominal) to local communities and local indigenous groups over the Project's life
- Opportunities for approximately 10,000 workers during the peak of the construction phase and direct employment opportunities for approximately 2,000 workers during the operations phase
- Engagement of local contractors and service providers, generating further substantial employment within the Philippines.

NEXT STEPS

The Project has a number of stages to complete before final construction can commence including approvals from the government, the community and SMI Shareholders.

Making this Project a reality requires us to work in partnership with our stakeholders and we would continue to work openly with them, particularly those who have concerns and queries about our proposed Project activities.

Incorporating this feedback into our plans would ensure the Project can become a blueprint for ethical large-scale modern mineral development in the Philippines, including best practice in resettlement programs, indigenous consultation, as well as EIAs.

¹USD2.8 billion. ²USD6.4 billion. ³USD830 million. (Based on exchange rate of USD1 = PhP48)
Disclaimer: The content of this document was accurate, to the best of SMI's knowledge, at the time of publication (May 2011).

