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# **Environmental Protection**

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- **0** incident

  TMF environmental accidents or major environmental accidents
- **49.42%**Comprehensive utilization rate of waste rock
- \$2.9 million Total environmental protection investment
- 13.11% Comprehensive utilization rate of tailings
- 100% Coverage of ISO14001 and ISO50001 certifications







## **Environmental Management System**

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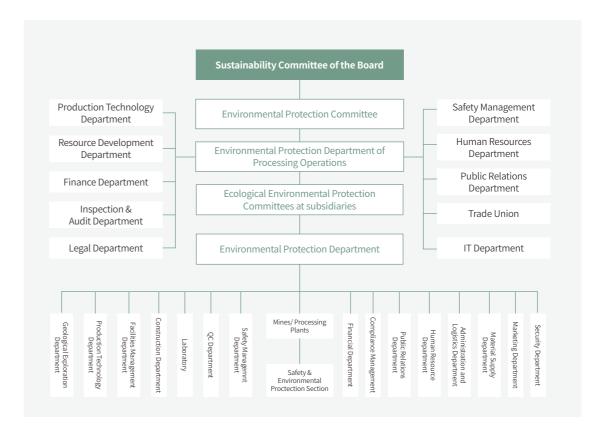
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## Organizational Structure of Environmental Management

Silvercorp attaches great importance to the sustainable development of the mining industry and society. Adhering to its business philosophy of "Safe, Efficient, Green, and Harmonious" and the ecological management concept of "Lucid waters and lush mountains are invaluable assets". The Company has been focusing on environmental protection since its inception with continuous investments in green development. In recent years, the Company has continuously optimized its green development management capabilities and performance, reduced its environmental impact, and constantly explored new paths for green development to promote the high-quality and green transformation of the Company.

The Company has established a sound environmental management system and incorporated environmental protection into Board-level supervision. At the Board level, we established the Sustainability Committee, chaired by Marina Katusa, Independent Director, for the management and supervision of the environmental protection issues of the Company, including carbon reduction and climate actions, water resource management, waste management, and biodiversity, etc. At the management level, we established the Environmental Protection Committee, chaired by President of Silvercorp China, Mr. Lichang Peng, with the Environmental Protection Department of Processing Operations as the implementation unit, and supported by other departments at the Beijing Management Center. At the implementation level, all of our subsidiaries have set up an Ecological Environmental Protection Committee, with the Environmental Protection Department as the implementation unit, and the Safety and Environmental Protection Division of the mines and processing plants ensure the implementation of specific tasks. Both Henan Found and Guangdong Found first passed the ISO14001 environmental management system certification in 2021. In Fiscal 2023, both Henan Found and Guangdong Found have passed the annual inspection of the environmental management system.











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### Systems and Policies

The Company is committed to following the environmental protection laws and regulations of government authorities and continuously improves its internal environmental management practices. We have established and strictly implement the Environmental Protection Responsibility System, the Environmental Protection Management System, and other relevant policies, and carefully review technical documents such as the environmental impact assessment report and design of new construction, refurbishing, and expansion projects. We require that pollution mitigation facilities are designed, constructed, and implemented for all projects and that they shall meet the requirements of corresponding environmental impact assessments and shall be dismantled without authorization or left unused.

In Fiscal 2023, the Company compiled the *Silvercorp Environmental Protection Refined Management and Digital Transformation Handbook*, with the Environmental Protection Department of the processing plants as the project lead, laying the

system foundation for centralized environmental management across the group. The Handbook stipulates detailed management regulations on various dimensions of ecological and environmental protection of mine, including surface water pollution prevention, groundwater pollution prevention, soil pollution prevention, mine geological environment protection and land reclamation, green mine construction, biodiversity protection, and climate response. The Handbook further clarifies the scope and responsibilities of environmental protection management items, marking great progress with the ecological environment protection of the Company. In Fiscal 2023, the Company also released the Environmental Protection Policy to the public, communicating our environmental protection philosophy and objectives to our stakeholders.

To achieve centralized management of our environmental protection efforts, we first centralized the process of setting environmental protection targets for our subsidiaries, formulating environmental protection targets from three aspects: ecological protection, pollution control, and environmental protection management, which will be assessed by the head office.

In Fiscal 2023, we established an ESG performance appraisal system, which includes key environmental indicators such as greenhouse gas emission intensity, the comprehensive utilization rate of tailings, the comprehensive utilization rate of waste rock, and new water withdrawal intensity. These indicators are linked to the performance appraisal of various management levels to further ensure the accountability of environmental management responsibilities.

#### Policy Disclosure

To view the *Environmental Protection Policy* in full, please click on the link or scan the QR Code.



**Environmental Protection Policy** 

#### » Silvercorp's Environmental Protection Targets:

Ore processing wastewater to the outside 0;

Safe disposal of hazardous wastes 100%;

Dust control compliance rate 100%;

Compliance discharge rate of mine water inflow 100%;

Comprehensive utilization rate of waste rock  $\geq 95\%$ .

Compliance rate of environmental monitoring results 100%;

To establish a robust environmental management system, achieve remarkable results in pollution control and ecological environment protection, effectively ensure environmental safety, continuously improve environmental quality, and make new progress in the construction of ecological mines.

Pollution
Control
Targets

Environmental
Protection
Management
Targets

Fargets

Operating rate of environmental protection facilities  $\geq 95\%$ ;

Reclamation rate of restorable land 100%;

The implementation rate of a construction projects the three simultaneous requirements (pollution mitigation facilities must be designed, constructed, and implemented simultaneously), and the project environmental protection acceptance rates of trial production and completion all reached 100%.

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#### Green Mine Construction

In Fiscal 2023, the Company continued the investment and efforts to build green mines. Henan Found invested \$4.3 million to promote the construction of green mines, including road hardening, enclosing stockpile areas with structures, building employee dormitories, carrying out environmental protection projects, and land reclamation, aiming at enhancing the overall planning for green mine construction. The overall green mine planning for the SGX-HZG silver-lead-zinc mine, the HPG silver-lead mine, the TLP-LM silver-lead mine, the TLP-LM silver-lead mine, Dongcaogou gold-silver mine, and the processing plant have been completed and will be implemented subsequently. Guangdong Found invested over \$1.5 million to build the XRT Intelligent Pre-Selection System at the processing plant and the Automated Tunnel Drainage System, which greatly improves the production efficiency of the mines. In addition, Guangdong Found has completed the green mine self-evaluation and developed relevant rectification plans based on the problems identified. With three rectification items completed, the company's self-evaluation score was raised to 96 points.



November, 2015

December, 2020

December, 2020

December, 2020

December, 2021

March 2023

Ying Mining District, Henan Province, China - SGX-HZG silver-lead-

zinc mine was selected into the National **Green Mine List** 

Ying Mining District, Henan Province, China - TLP-LM silver-lead mine was selected into the National **Green Mine List** 

Ying Mining District, Henan Province, China -HPG silver-lead mine was selected into the National **Green Mine List** 

GC lead-zinc mine, Guangdong Province, China was selected into the National Green Mine List

Ying Mining District, Henan Province, China - DCG goldsilver mine was selected into the Provincial-level **Green Mine List of Henan Province** 

Ying Mining District, Henan Province, China - DCG gold-silver mine passed the thirdparty inspection and evaluation.

#### » Green Mine Construction Work Plan





### **Environmental Protection Actions**

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#### Actions in Fiscal 2023

#### **Environmental Investment**

In Fiscal 2023, Silvercorp invested about \$2.9 million in environmental protection, an increase of 49% year-on-year. Of which, about \$2.7 million was invested in the Ying Mining District, Henan Province, and about \$214,555 was invested in the GC Mine, Guangdong Province.

#### **Environmental Awareness Raising**

In June 2022, Henan Found launched the "June 5th" World Environment Day community environmental awareness raising event with the theme of "Building a Clean and Beautiful World Together", carrying out environmental education and knowledge sharing activities in Xiayu Township Primary School.

Guangdong Found organized volunteers to help clean up the surrounding villages on "June 5th" World Environment Day, practicing its commitment that "everyone is responsible for protecting the environment".



Henan Found carrying out environmental awareness raising event in schools

#### **Environmental Training**

In Fiscal 2023, the Company continuously improved the management of environmental protection training. In the section on environmental training of the *Silvercorp Environmental Protection Refined Management and Digital Transformation Handbook*, the Company lays out detailed requirements on the management approaches and work flow of environmental protection training to ensure standardized management of environmental protection training. In Fiscal 2023, the Company carried out environmental protection training covering a total of 1,504 person-times, an increase of 35% year-on-year, and invested about \$10,801 in dedicated funding for environmental protection training, an increase of 21% year-on-year.

In October 2022, the Yellow River Protection Law of the People's Republic of China was formally approved, providing new requirements for the protection of the ecological environment of the Yellow River basin. Luoyang City, where Henan Found is located. Henan Found responded quickly and organized employee trainings and awareness raising activities on the Yellow River Protection Law, further enhancing the awareness of environmental protection laws and regulations among employees and calling for individuals to take action to protect the Mother River of China.



Henan Found carried out the Yellow River Protection Law awareness raising activity

#### **Environmental Compliance**

In Fiscal 2023, there were no incidents of major environmental protection violations in any of our mines in China.



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## **Water Resource Management**

Water resource shortage is increasingly becoming a pressing global issue. It is imperative for enterprises to realize effective management of water resources. Effective water resources management not only helps us reduce the cost of water resources in our operations and the potential risk of stricter water resources policies, but also helps protect local communities.

Silvercorp actively abides by the relevant laws and regulations where its operates, including the Water Law of the People's Republic of China, the Water Pollution Prevention Law of the People's Republic of China, the Environmental Protection Law of the People's Republic of China, the Yellow River Protection Law of the People's Republic of China, and the relevant regulations of Henan Province and Guangdong Province on water resource management. The Company also continuously optimizes its water resource management system internally. The Sustainability Committee of the Board oversees the formulation of the Company's water resources management strategy and the relevant key performance results. The Chairman of the Company, Dr. Rui Feng, is responsible for supervising and guiding the ESG Management Center to formulate the annual water resources management work plan. Mr. Lichang Peng, President of Silvercorp China, chairs the ESG Management Center oversees the formulation of specific water resource management work plans for the subsidiaries and supervise their implementation with the support the Environmental Protection Department of Processing Operations of the Beijing head office. Water resource management at the subsidiary level follows the tiered governance structure of "General Manager - Ecological Environmental Protection Committee - Environmental Protection Department". In Fiscal 2023, there were no non-compliance incident related to water quality permits, standards, and regulations at any of our operations.

In Fiscal 2023, Henan Found launched the application for water-saving enterprise title and passed the expert review organized by the Luoning County water conservation authority. Guangdong Found removed silt from the backwater pool of the tailings dry yard to effectively reduce the water level of the backwater, mitigate environmental risks and reduce the energy consumption of the backwater pump.



Carry out water sample testing

## **Improving Water Efficiency**

Silvercorp's water sources are fresh water, including the reuse of mine water inflow and the withdrawal of new water. In Fiscal 2023, the Company used a total of 3,696,861 cubic meters of water, of which new water withdrawal stood at 698,805 cubic meters, and reused mine water inflow stood at 2,998,056 cubic meters, fresh water withdrawal intensity was 17,859 m³/million dollar revenue. The Company strives to optimize its water consumption structure by replacing new water withdrawal with mine water inflow and recycled wastewater from processing plants to effectively improve water efficiency. Water recycling and utilization rate increased from 83.52% in Fiscal 2022 to 84.85%, an increase of 5.63% compared with 2020.

#### » Silvercorp's Water Resource Management Targets

Treat domestic sewage and mine water inflow to meet reuse standards, with the remaining discharged.

No ore processing wastewater discharge to the outside. We are targeting an 8% increase in water recycling and utilization rate from the 2020 baseline by 2030.

Reuse treated mine water inflow in mining production according to actual production conditions.

Reduce fresh water withdrawal intensity. We are targeting a 10% reduction in fresh water withdrawal intensity from the 2020 baseline by 2030.

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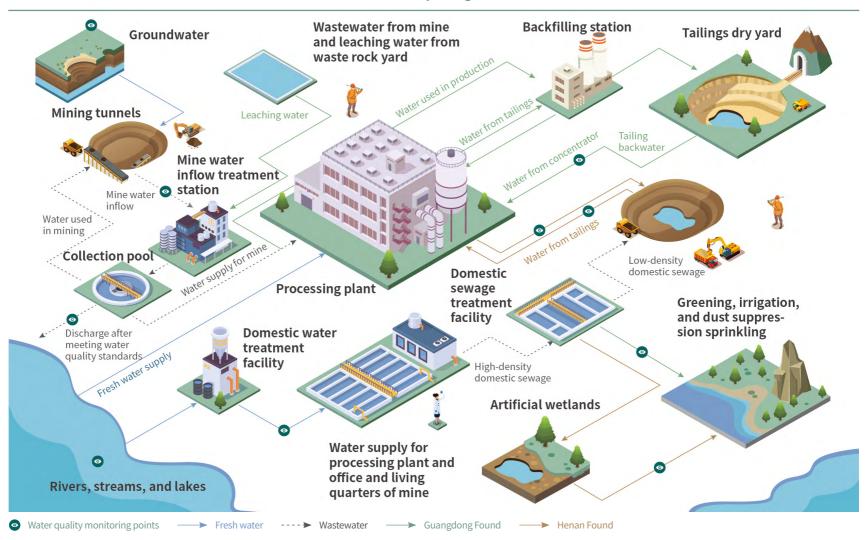


#### Water Recycle System

The diagram below illustrates Silvercorp's water resource recycling. Mine water inflow is treated at the collection pool before being reused in mining operations, processing plants, TMFs, or for domestic purposes. The unused amount will be treated to meet discharge standards and then discharged into local rivers, streams, lakes, or artificial wetlands, where they can still be reused for greening, irrigation, and dust suppression sprinkling purposes.

In addition, the Company has setup up water quality monitoring points at all water recycle points, including groundwater withdrawal, mine water inflow treatment and discharge, local rivers and lakes, TMFs and TMF backwater pools, domestic sewage treatment and discharge, and artificial wetlands. Water quality is monitored over the entire water recycling process to minimize environmental risks.

#### **Water Recycle Diagram**



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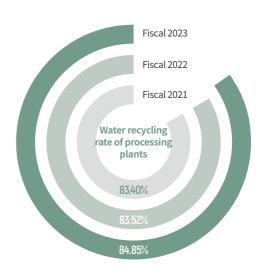
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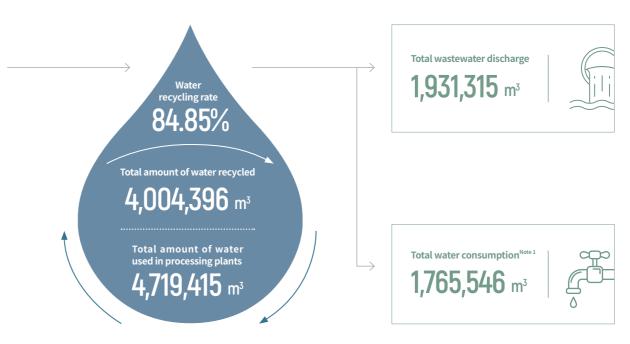
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#### Case: Henan Found Upgraded Mine Water Inflow Management Facilities

In Fiscal 2023, Henan Found completed the automation transformation of the mine water inflow pumping station of the Shagou Mine, resulting in higher reuse of mine water inflow and reduction in new water withdrawal, and the chemical application system of the mine water inflow treatment facility of the mine, realizing more precision chemical application and better treatment results. The discharge outlet was also upgraded and standardized to ensure better wastewater discharge standard compliance rate. In Fiscal 2022, the average comprehensive utilization rate of mine water intake of Shagou Mine reached 33.7%, which is expected to be improved to 60% in the next fiscal year.

## Water Pollution Prevention and Control

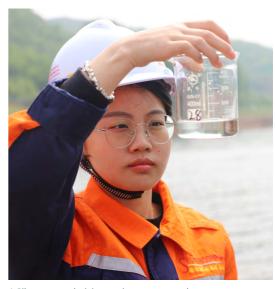
Silvercorp strictly implements water pollution prevention and control measures, and encourages all subsidiaries to build wastewater treatment facilities with in-depth or moderate treatment capabilities to further, improve its wastewater treatment and reuse performance and ensure all wastewater is properly treated and meet the relevant standards before being discharged.

The wastewater generated by our operations mainly consists of ore processing wastewater, domestic sewage, and mining wastewater. All ore processing wastewater is collected and completely reused in the ore processing system. While domestic sewage is treated centrally and used for greening water in the mining area and the surrounding forestland with no external discharge. Mine water inflow first goes through chemical precipitation treatment to meet the requirements of the Environmental Quality Standards for Surface Water, then the treated water is mainly used in underground mining or for ore processing, and the amount discharged is all properly treated to meet compliance requirements. Rainwater is collected and directly discharged into rivers without mixing with process water and causing pollution. In Fiscal 2023, Guangdong Found conducted desilting operations in the backwater pool of the tailings dry yard, which increased the effective capacity and reduced the water level of the backwater pool, effectively reducing the risk of process wastewater discharge.

## **Evaluating Water Stress**

Silvercorp carried out a baseline water stress evaluation using the AqueductTM Water Risk Atlas Tool developed by the World Resources Institute (WRI). Evaluation results show that all of the Company's water withdrawal is fresh water, and 86% of the operating areas (Ying Mining District) are in high water risk areas. The location of the Ying Mining District experiences high/very highwater stress according to Chinese standards and global standards respectively.

In Fiscal 2023, Henan Found specified its targets to address water pressure: to install automatic control equipment at backwater pump stations, and strive to reuse over 60% of mine water inflow and no discharge of ore processing wastewater to the outside, to reduce the new water withdrawal intensity. All of our mines continuously improved water recycling and reuse rate through measures such as process optimization to reduce new water withdrawal intensity. In Fiscal 2023, our new water withdrawal intensity was reduced to 3,376 cubic meters per million dollar revenue.



A Silvercorp technician testing water samples.

	Water Stress by Global Standards	Water Stress by Chinese Standards	Percentage of Fresh Water Withdrawn (%) <sup>1</sup>	Percentage of Fresh Water Consumed (%) <sup>2</sup>
Ying Mining District	Very high (>80%)	High (40-80%)	79.87%	88.93%
GC Mine	Low to Medium (10-20%)	Low to Medium (10-20%)	20.13%	11.07%

Note 1: In our water recycling graph, all water withdrawn is fresh water. The percentage of fresh water withdrawn is calculated from the total fresh water withdrawn from all operations.

Note 2: In our water recycling graph, all water consumed is fresh water. The percentage of fresh water consumed is calculated from the total fresh water consumed from all operations.

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## **Waste Management**

The waste generated in mining operations includes both hazardous waste and non-hazardous waste. In Fiscal 2023, the Company compiled the *Environmental Protection Refined Management* and *Digital Transformation Handbook*. In the Solid Waste Prevention and Control section, the Handbook specifies the detailed requirements for waste management, including detailed requirements on the storage, transportation, and treatment of waste in three categories: non-hazardous waste, hazardous waste, and domestic waste.

The hazardous waste generated by the Company mainly includes waste engine oil and waste batteries, which are 100% transferred to and disposed of by qualified thirdparties contracted by the Company. The non-hazardous waste generated in our operations mainly includes tailings and waste rock. In accordance with the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the National Hazardous Waste List, the Pollution Control Standards for General Industrial Solid Waste Storage and Landfill(GB18599-2020) and the Pollution Control Standards for Hazardous Waste Storage (GB18597-2001), the Company has formulated the Solid Waste Management Policy to manage its solid waste based on the principle of "maximizing comprehensive utilization". Regarding waste rock management, waste rock not recycled or used as backfill is disposed of by contracted third-parties. Henan Found contracted its subsidiary, Luoyang Hongfa Building Material Aggregate Co., Ltd., to process the waste rock into construction materials for sale. Guangdong Found contracted a local company for the transportation and disposal of waste rock from the mining shafts, which is also processed into construction materials to further increase the utilization rate of waste rock. In Fiscal 2023, the Company's utilization rate of waste rock for backfill was 49.42%, which had decreased slightly from the previous year mainly due to both the higher volume of waste rock from the higher

production volume of the year and the lower than usual sales of construction material caused by the slowdown of China's real estate market. Regarding tailings management, the Company has built TMFs, tailings dry storage yards, and backfill stations to store dry tailings generated in ore processing, part of which is backfilled into mining tunnels to improve the comprehensive utilization rate of tailings. In Fiscal 2023, the Company's utilization rate of tailings as backfill was 13.11%, an increase of nearly two percentage points from that of Fiscal 2022.

For the domestic waste generated by the employees' living and working in the mining area, we signed the *Agreement on Domestic Waste Transfer and Disposal* with qualified third parties approved by the government

where we operate for centralized collection and disposal. Domestic waste generated by our contractor's working crews is also help reduce cost and ensure better environmental sanitation management of the mines.

During the mining process, silt is generated from intunnel drilling operations. The Company adheres to green construction principles and uses silt for backfilling as well. Instead of the traditional backfilling method of transporting to the surface and backfill, we directly bagged the silt for backfilling where it is generated, which not only ensures better conditions in production tunnels but also reduces the emissions from the transportation process.

Wests Bissland and Bissassal	Fiscal 2023		
Waste Discharge and Disposal	Ying Mining District	GC Mine	Total
Hazardous waste (tonnes)	26.03	1.81	27.84
Including: Waste engine oil (tonnes)	4.65	1.81	6.46
Waste batteries (tonnes)	21.38	0	21.38
Non-hazardous waste (tonnes)	1,424,120	119,724	1,543,844
Including: Tailings not used as backfill (tonnes)	714,016	119,574	833,590
Waste rock not recycled or used as backfill (tonnes)	709,686	0	709,686
Other non-hazardous waste (tonnes)	418	150	568
Domestic waste to landfill (tonnes)	688	52	740

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#### Case: Guangdong Found's Intelligent Waste Rock Screening Pilot Project Yielded Good Results

The production process in the GC Mine has challenges due to a high rate of waste rock mixing and a poor recovery grade because the majority of the ore deposits there are quite thin. To prevent waste rock from entering the processing stage and affecting production efficiency. The processes once had workers manually pre-sorting at the ore storage. However, it is difficult to manually screen most small and medium-sized waste rock and manual screening may also result in significant metal loss.

To solve this problem, Guangdong Found launched the intelligent waste rock screening pilot project in Fiscal 2023. In March 2023, the XRT intelligent prescreening system started operating. Using digitally controlled equipment to screen waste rock, the XRT pre-screening technology greatly improves the separation rate of ore and waste rock, which reduces the amount of waste rock entering the processing process, resulting in both lower usage of processing chemicals and lower energy consumption, as well as

a lower amount of tailings from the processing plant which improves service life at the tailings dry yard. In addition to the savings in natural resources, the system also saves on labor costs, effectively reducing the number of workers needed in mining operations by about 40%, reducing operating risks, improving work efficiency, and saving mining costs by more than over \$1 million per year.



The XRT Intelligent Pre-screening System





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## **Air Quality Management**

#### **Dust Control**

Silvercorp strictly implements the requirements of relevant policies, regulations and standards on air pollution prevention and control, monitors air pollutants emissions and strives to improve the treatment of air pollution and ensure compliance with emissions requirements. The Company contracts qualified inspection agencies to monitor its air quality regularly and has increased the frequency of monitoring recently.

The Company has formulated the Company Dust Prevention and Control Implementation Plan. Focusing on controlling from the source and comprehensive utilization, the Company has developed a targeted plan for dust prevention and treatment that includes measures such as keeping dust-producing processes and equipment enclosed to control dust at the source, upgrading dust control measures in production and transportation operations, and strengthening and modernizing dust control systems and capabilities. The Company also strives to utilize dust where possible. Dust produced by the ore crushing system is collected and mixed with water to become pulp, which is then pumped to the flotation workshop. In Fiscal 2023, the Company compiled the Environmental Protection Refined Management and Digital Transformation Handbook,

specifying the different management approaches and control measures for different air pollutants and calling for stronger capabilities to prevent and treat air pollution. Guangdong Found has revised the *Air Pollution Prevention and Control Management Policy* to further strengthen the management of dust control. In addition, Guangdong Found added fog cannons in different locations of the mines to reduce dust.



Using fog cannons to reduce dust

Sources of Dust	Dust Control Approach	
Waste rock yard	Reducing dust with dust nets and fog cannons.	
Transportation roads	• Conducting regularly clean up along the transportation route, covering up the trunk of the transportation vehicles, and automatically cleaning vehicles entering and exiting our plants.	
Ore stockpiles	<ul> <li>Paving the ore storage facilities with hardened surfaces and using fog cannon for dust suppression; and using sealed ore storage facilities and artificial fog systems to reduce dust in the processing plants.</li> </ul>	
Industrial site	<ul> <li>Using wet dust removal equipment and bag filters in the processing plant; installing dust collection equipment and water sprinkling system at dust production points.</li> <li>Sealing up the top space of sifting workshop and ore concentrate storage, collecting air with particulate waste using airtight exhaust, and using bag filters to remove the particulate waste.</li> </ul>	

#### Actions in Fiscal 2023

#### Ying Mining District

Upgraded roads in mining areas to hardened surface;

 Built a sealed structure over the ore stockpiling areas with artificial fog system, deployed fog cannons in unloading points for materials (ore, waste rock), and installed vehicle cleaning device at the entrance to of mines and processing plants;

Carried out regular road cleaning, sprinkling and dust suppression.

#### GC Mine

- Arranged sprinkler vehicles to sprinkle water for dust suppression along the roads under certain weather conditions in mines to reduce dust;
- Conducted regular maintenance of road sprinkling system to ensure stable operation;
- Deployed fog cannons at the unloading points of temporary ore storage sites and waste rock storage sites to improve dust control.



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## Air Pollutant Management

The Company actively carries out flue gas control and strives to reduce the amount of flue gas generated in its production and operation activities. The Company had decommissioned all coal-fired boilers and replaced them with electric boilers, thus eliminating the emission of sulfur oxides.

Silvercorp manages its air pollutant emissions in an accordance with the requirements of the Comprehensive Standards for Emission of Atmospheric Pollutants (GB16297-1996) and the Standard for Emission Limit of Atmospheric Pollutants (DB44/27-2001). The Company requires all mines to monitor both unorganized and organized waste gas generated in the mining production process at least quarterly and has formulated a Waste Gas Monitoring List with different alert levels set for mines in different geographical locations. The Company also specifies the relevant standards and responsibilities regarding air pollutants in the newly compiled Environmental Protection Refined Management and Digital Transformation Handbook.



Dust collection facility



#### **Air Pollutant Emissions**

Sulfur oxides (SO <sub>x</sub> )	(tonnes) Note 1	Nitrous oxides (NOx)	(tonnes) Note 2
Fiscal 2023 0		Fiscal 2023	<b>614.48</b> <sup>Note 3</sup>
Fiscal 2022 0		Fiscal 2022	500.07
Fiscal 2021 0		Fiscal 2021	464.06
Ammonia nitrogen compounds	(tonnes)	Note 1: Coal-fired boilers have b	ieen completaly
	(2211122)		o there are no sulfide emissions.
Fiscal 2023 0,474		Note 2: Contains nitrogen oxide: dynamite and combustion of die	
Fiscal 2022 0.526		Note 3: The amount of nitrogen relatively high, which is mainly (ammonium nitrate) used to inc	due to an increase in dynamite
Fiscal 2021 0.53		Henan Found.	

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## **Environmental Protection**

## **Biodiversity Management**

Silvercorp actively carries biodiversity protection to reduce non-compliance costs, avoid potential penalties, facilitate the efforts to obtain mining licenses, and protect the Company's reputation. The Company abides by relevant environmental protection laws and regulations, such as the Technical Specifications for Mine Ecological Environment Protection and Restoration Management issued by the Ministry of Ecology and Environment of China, strictly conducts environmental impact assessments in accordance with the law before entering any project, identifies ecologically sensitive areas, avoids areas prohibited for development due to the ecological red line, and takes appropriate biodiversity protection measures along the whole life cycle of mining operations to minimize or eliminate our environmental impact. Silvercorp is committed to refraining from exploration and mining in World Heritage sites and any area prohibited for development due to the ecological red line, and respecting all internationally required legitimate protected areas, including protected areas in categories Ia, Ib, II, III, IV, V, or VI as defined by the International Union for Conservation of Nature (IUCN).



Well preserved biodiversity and ecological environment in our mining areas

### **Our Biodiversity Commitments**

- We will take the initiative to identify ecologically sensitive areas, refrain from
  exploration and mining in World Heritage sites and any area prohibited for
  development due to the ecological red line, and respect all internationally
  required legal protected areas, including protected areas in categories Ia,
  Ib, II, III, IV, V, or VI as defined by the International Union for Conservation of
  Nature (IUCN).
- We will conduct biodiversity conservation training annually to foster awareness of biodiversity conservation among frontline workers.
- We will actively take measures to mitigate the negative ecological impact of our production operations.
- We will actively promote our value chain partners to fulfill these commitments.







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#### Implementation Process of Biodiversity Management System



Establish an overall decision-making framework for biodiversity management, recognize the importance of biodiversity, set specific conservation targets, and commit to implementing biodiversity management in long-term operations and various projects;

Compile a report to document the biodiversity values at the project site, the effectiveness of biodiversity conservation, and the expected results;





Assess the biodiversity risks associated with mining projects and mitigation possibilities;

Take appropriate ecological impact control measures in accordance with risk levels;







Monitor changes in biodiversity during project operations;

Extend biodiversity conservation strategies and objectives to the overall policy system of the Company, and ensure their implementation with appropriate operational resources.





#### **Our Biodiversity Initiatives**

#### Improving biodiversity management system

We strictly abide by the Wildlife *Protection Law of the People's Republic of China*, the *Regulations of the People's Republic of China on Nature Reserves*, the *Convention on Biological Diversity*, and relevant laws and regulations. We continuously optimize our management systems, and guide our mines and operations to pay attention to ecological protection.

#### Avoid damages to biodiversity

We strictly forbid any exploration, mining, and construction activities in nature reserves and areas within the ecological red line. We take active measures to protect the biodiversity in our mining areas through either on-site protection or relocation and protection.

#### Conduct regular ecological monitoring

We carry out ecological monitoring around our mines and operations on a quarterly basis to understand the ecological situation in the mining areas and collect baseline information needed for improving the protection mechanism.

#### Implement biodiversity compensation

We plan to protect local precious plants by building botanical gardens, nature reserves, or wetland protected areas. We also strive to grow ecological compensation forests to offset and compensate for the damages to forest.

#### Raising awareness of biodiversity

We carry out relevant awareness raising activities on key dates such as the International Day of Biodiversity and the World Environment Day, as well as a variety of other biodiversity education programs and activities from time to time.

In Fiscal 2023, the Company had no incident of biodiversity damage. As of March 31, 2023, none of our mines are situated in protected areas or within or near the habitat of endangered species.

In Fiscal 2023, Henan Found carried out biodiversity risk identification during the environmental impact assessment process for its No.3 Processing Plant and the Shimengou TMF. Guangdong Found also made efforts to protect biodiversity, such as setting up guardrails and protective nets round pools to prevent wild animals from falling in. The Company also uses a diverse mixture of trees and shrubs of local species for mining area reclamation to ensure plant diversity and prevent the invasion of alien species.

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#### **Acid Rock Drainage**

Acid rock drainage may pollute water sources and cause biodiversity damage around mining areas. In Fiscal 2023, the Company implemented the identification and monitoring of acid rock drainage risks in accordance with the *Global Acid Rock Drainage Guidelines*, and identified that there were such risks in GC Mine, Guangdong Province. We actively monitor the risks and have formulated risk mitigation measures to prevent risk events from happening.

The Company also attaches great importance to environmental monitoring in mining areas, and

regularly tests groundwater and soil in mining areas to ensure compliance with relevant standards. In the *Environmental Protection Refined Management and Digital Transformation Handbook* compiled in Fiscal 2023, there are a series of requirements for the locations, approaches, frequency, and implementation standards and monitoring factors for monitoring water, soil, emissions, and noise, laying out a robust environmental monitoring management system that ensures the effective implementation of various environmental monitoring activities.



Acid rock drainage risk monitoring spots of GC Mine

## Reclamation and Ecological Environment Restoration

## **Reclamation and Ecological Restoration**

Silvercorp carries out reclamation and ecological restoration in strict accordance with the *Mine Geological Environment Restoration and Mitigation Plan*. Henan Found and Guangdong Found formulate their *Ecological Environmental Protection Work Plan* every year, drawing out the overall plan and dedicated funding request for vegetation restoration for the next year for the head office for centralized approval. The effective implementation of these plans help mitigate the interference caused by our operations to the ecological environment.

The Company continues to optimize the management of land reclamation and ecological restoration, and update ecological protection targets based on actual conditions to make the targets more feasible, so as to minimize

the impact on the local ecological environment with its production activities. The Ecological Restoration section of the *Environmental Protection Refined Management and Digital Transformation Handbook* specifies the requirements for a variety of ecological and environmental restoration activities, including mining area greening and seedling conservation, ecological restoration engineering management, and ecological restoration management of TMFs, etc. In early 2022, the Company set the annual land reclamation target of 6.62 hectares, which had been successfully completed as planned. In Fiscal 2023, Silvercorp completed the reclamation of 9.98 hectares in total.

In Fiscal 2023, the Company implemented environmental protection and land reclamation

tasks of mining areas concurrently with production. The Company also drafted a summary report of its environmental protection and land reclamation efforts in recent years, and organized third-party evaluation of the report. Henan Found formulated reclamation and ecological restoration management policies, such as the Land Reclamation Plan and the Soil and Water Conservation Plan for the construction of the new Shimengou TMF to ensure better environmental management. In addition, the Henan processing plant stopped using sodium carbonate and reduced the use of zinc sulfate, which further reduced the run-off of ore processing chemicals agents and their impact on the environment, effectively preventing soil acidification and ensuring better growth conditions for plants in the mining area.









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#### **Reclamation Methods**

- For geological hazards such as collapse sites and landslide sites, we mainly focus on protection which includes slope cutting and levelling, then strengthening through shotcrete-bolt support or a retaining wall.
- For dam surfaces of dry stack TMFs and slopes of waste rock yards, we stack them in a step-like manner, build drainage facilities, level the ground and backfill with topsoil, then plant shrubs, grass, and plants to restore the greenery.
- For slopes next to roads and buildings, as well as those with drainage facilities built at the foot of the slope, we plant climbing plants at the foot of the slope or use a seeder to sow grass seeds.

Mining Area	Regreening Results
Ying Mining District	<ul> <li>Planted a total of 53,418 saplings of 23 varieties</li> <li>Sowed a total of 2,237kg of grass seeds of seven varieties</li> </ul>
GC Mine	<ul> <li>Planted a total of 7,760 saplings of eleven varieties</li> <li>Sowed a total of 150kg of grass seeds of eight varieties</li> </ul>



Sowing grass seeds in spring time

Note:	2022		
Land Reclamation Note1	Ying Mining District	GC Mine	Total
Area with ecological disturbance but not yet reclaimed (ha) (Beginning of Year)	76.62	40.90	117.52
Area with newly caused ecological disturbance during the year (ha)	8.27	0	8.27
Area reclaimed in full year (ha)	5.26	1.36	6.62
Area with ecological disturbance but not yet reclaimed (ha) (End of Year)	79.63	39.54	119.17
Investment in land reclamation and environmental mitigation (millions of \$)	0.39	0.13	0.52

Note1: Data calculated based on the Land Reclamation Plan and Ecological Restoration Plan, which is based on calendar year, not fiscal year.

## **Addressing Climate Change**

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## Climate Change Risks and Responses

Silvercorp believes that climate change not only matters to energy conservation and emissions reduction, but also matters to the development of humanity. The Company attaches great importance to addressing climate risks, continuously formulating and optimizing climate risk response policies, and formulating and ensuring the effective implementation of emergency management systems and plans.

Based on recommendations by the *Task Force on Climate-related Financial Disclosures* (*TCFD*), the Company has identified its key climate-related risks, and is committed to developing an ESG-based action plan/framework to address the outlined climate risks.

In accordance with the goals and principles of the *United Nations Framework Convention on Climate Change* and the *Paris Agreement* and with the ultimate goal of limiting the average temperature increase to within 1.5 degrees Celsius above the preindustrial level, we consistently improve our GHG emission management mechanism internally, committing to reducing GHG emissions and have set a goal of reducing GHG intensity by 20% by 2030 compared to 2020. Externally, we provide mineral materials to suport the global energy transition businessand are committed to contributing to Silvercorp's efforts to compact global warming.



Henan Found installing photovoltaic power generation facilities

#### Physical Risks

Туре	Climate Related Risks and Impacts
Short-term Risk	The increased frequency of extreme weather events, such as torrential rains, floods, and typhoons, can lead to the interruption of operations or even the closure of mines, the washing out of roads, and dam failures due to rising water levels in TMFs. This could cause the Company's production capacity to decline, injure employees/ contractors or result in environmental problems.
Long-term Risk	Changes in precipitation and extreme fluctuations in weather patterns can lead to higher infrastructure costs (e.g., extended construction periods, damage to equipment) and higher insurance costs for equipment and personnel.

#### Transition Risks

Туре	Climate Related Risks and Impacts
Policy and Law Risk	China will introduce a quota system for carbon emissions, which could increase compliance costs if the Company is included in the national carbon trading market as key emitters.
Reputation Risk	Stakeholders are paying more attention to the Company's response to climate change, natural resource consumption, etc., and unmet expectations may have a negative impact on the Company's reputation.
Market Risk	If downstream customers investigate the carbon emission intensity of unit products, it will increase the uncertainty of the Company's business sales and cause corresponding market risks.

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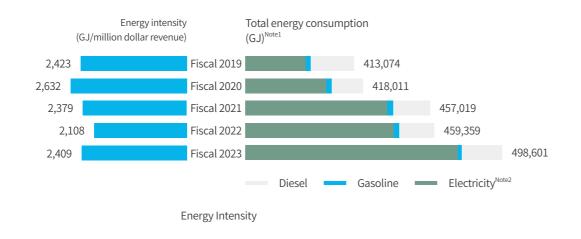
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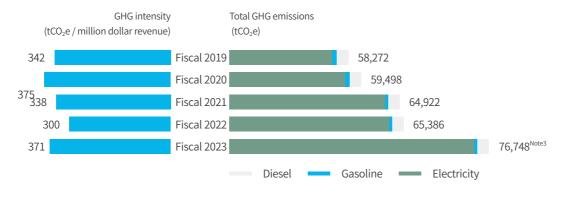
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## Energy Consumption and Greenhouse Gas Emission Management

The Company continuously strives to optimize its energy structure through a focus on energy efficiency and the circular utilization of resources, seeking to lower energy consumption and emissions and reduce production and operation costs. In addition to phasing out the use of coal, the Company actively explores and carries out pilot projects on new energy utilization, adopts new energy equipment in lighting, transportation, heating, and cooling to improve energy efficiency. In Fiscal 2023, Silvercorp's energy intensity was 2,409 GJ/million dollar revenue; its greenhouse gas emissions intensity was 371 tonnes CO<sub>2</sub>-eq/million dollar revenue. Both its annual energy consumption and GHG emissions intensity indicators increased slightly due to the impact of COVID-19 on production and sales.

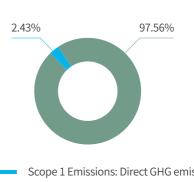
In Fiscal 2023, Henan Found implemented the photovoltaic power generation project, building a total of 180 KW of installed generation capacity at its processing plant. The project started operating in December 2022. With an estimated annual generation capacity of 190,000 KWh per year, this project is expected to help save 76 tonnes of standard coal, reduce carbon dioxide emissions by 189 tonnes, and reduce sulfur dioxide emissions by 5.7 tonnes annually.





**GHG Emissions Intensity** 





Scope 1 Emissions: Direct GHG emissions

Scope 2 Emissions: Indirect GHG emissions

Note1: All mining operations of Silvercorp do not use coal or

Note 2: Electricity used by the Company's mining operations is purchased from the State Grid and the Southern Grid. Note 3: The increase of greenhouse gas emission data in Fiscal 2023 is mainly due to the adjustment of the conversion coefficient. In accordance with the Notice on Enterprises Greenhouse Gas Emissions Reporting Management for the Power Generation Industry (2023-2025), both mines used a new electricity-carbon emissions conversion coefficient, which is 0.5703tCO<sub>2</sub>/MWh(The coefficients used to be 0.5271 for GC Mines and 0.5257 for Ying Mining Districts), for GHG emissions calculation this fiscal year. The new conversion coefficient is slightly higher than the one used in previous years, and led to an increase of 11,176 tonnes CO<sub>2</sub>-eq in the Scope 2 emissions data, which the Scope 1 emissions data virtually unaffected.





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## **Tailings Facilities Management**



## Risks and Challenges of TMFs

TMFs are usually man-made sources of mudslides with high potential energy, and the collapse or breach of a TMF can be catastrophic for nearby populations, infrastructure, and the environment. Silvercorp places a heightened focus on the safety and environmental risks of its TMFs and puts safety of the people above everything else. The Company actively works with the government and regulators to monitor and check for hazards at TMFs to ensure top-tier safety management.

#### Flooding

During the flood season, heavy rains may pour into the TMF, which, when coupled with inadequate drainage facilities, could cause flooding and then the collapse of the TMF.

#### Landslides

A landslide begins with a small crack in the TMF, which slowly grows before finally causing a landslide and dam failure.

#### Seepage failures

Ongoing seepage can accelerate the formation of TMF dry beaches and the solidification of tailings, making the dam more stable and safer. However, in the case of a poorly designed or constructed dam body or an aging drainage system, the infiltration line of the dam body may become high enough to cause a dam collapse.

#### Piping

As the water level rises, the gushing water also carries with it more sand and soil. If the sand layer under the dam is hollowed out, it will cause the dam to suddenly fall and even collapse.

## Cracking in dam body

Partial collapse or cracking in the dam body resulting from insufficient bearing capacity, improper design of the dam slope, or undesirable cross-sectional size can cause cracks to develop in the dam body and become a channel for concentrated leakage.

## Response Measures

Silvercorp strictly follows the *Global Industry Standard on Tailings Management* and the *Tailings Pond Safety Regulations (GB39496-2020)*, and in doing so ensures that its tailings discharge and dam construction are carried out in accordance with relevant design requirements, operation plans, and technical specifications, ensuring effective water level control, flood control, and seepage control. In addition, we have a monitoring system in place to monitor the main technical data of the TMFs in real time and carry out regular inspections for safety hazards. We have also developed a sound emergency management system to ensure the safe and stable operations of TMFs.

The Company intends to explore the efficient management of TMFs with tailings backfilling, striving to continuously increase its tailings backfilling rates and reduce the tailings disposal rate in the next three years. Meanwhile, the Company plans to achieve a 100% comprehensive utilization rate of tailings with technological innovation by the end of 2026, realizing "zero-tailing" mines.



TMF dam slope after reclamation

#### Systems and Policies

We continuously optimize our TMF management system. In Fiscal 2022, we revised and optimized the following systems and polices:

- The Safety Management Policy for Control and Seepage Drainage Facilities
- The Safety Management Policy for Flood Control Measures and Flood Drainage Facilities
- The Safety Management Policy for Tailings Transportation, Dam Building, and Discharge

#### **Emergency Planning**

We have developed emergency plans to enhance the response and preparedness for emergencies and disasters at the TMFs, including the *Comprehensive Emergency Plan for Production Safety Accidents in Dry Stack TMF*, the *Special Emergency Plan for Production Safety Accidents in Dry Stack TMF*, and the *Emergency Rescue Plan for Production Safety Accidents*.

Guangdong Found stipulated a number of TMF management policies, including the *Safety Management Policy for Dry Stack TMF*, the *Safety Inspection Policy for Dry Stack TMF*, and the *Management Policy on 24-hour Monitoring, Inspection and Shift Management for Dry Stack TMF*.

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#### Online Monitoring

An online monitoring system has been set up in the two major mining areas to support scientific decision-making through real-time monitoring of the safety status at the TMFs and enabling predictions and early warning.

GC Mine: Obtains critical real-time data from the online monitoring system in the dry stack tailings area, such as the infiltration line, the internal displacement, the surface displacement, and the precipitation. The data is synchronized to the Sky Eye and Earth Eye Safety Risk Early Warning and Prediction System for non-coal mine TMFs of the Department of Emergency Management of Guangdong Province, subject to government supervision.

Ying Mining District: The online TMF monitoring system and the key operational data are integrated into the Emergency Management System of Luoyang City, Henan Province and will be connected to the national monitoring platform as required in the future.

#### Inspection and Evaluation

We have established a multi-level TMF safety evaluation mechanism for ensuring the stability of the TMF dams, reviewing TMF emergency plans and conducting a TMF safety evaluation every three years, and conducting a dam stability analysis when the tailings dam reaches specified height (which is 1/2 to 2/3 of the final design height for Grade III or lower TMFs and 1/3 to 1/2 of the final design height for Grade I and Grade II TMFs).

We also perform flood routing and a dam stability assessment every year before raining season or other extreme weather events, producing a TMF onsite inspection report and inspecting the relevant flood control facilities.

#### Responsibility Management

We have designated personnel for production safety, with each subsidiary appointing a safety engineer with more than ten years of experience responsible for identifying, preventing, and managing TMF risks.

#### Public Disclosure

Silvercorp is committed to transparency through disclosure of TMF management in annual sustainability report and via corporate website and news releases.

#### Accident Reporting

We have established an open and transparent channel for reporting safety accidents while ensuring strict confidentiality of the identity information of whistleblowers.

We use the Eblog App to facilitate information-based monitoring and problem solving regarding TMFs.



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## **Emergency Plans**

Silvercorp strictly abides by the requirements of relevant laws and regulations regarding TMF management, and has established a sound TMF emergency management system and formulated targeted emergency response plans for common TMF hazards, including Comprehensive Emergency Plans for Safety Accidents in Tailings Dry Storage Yard, Special Emergency Plans for Accidents in Tailings Dry Storage Yard, On-site Disposal Plans for Tailings Dry Storage Yard, etc. The emergency plans manage TMF

safety hazards comprehensively from four aspects: accident risk analysis, emergency command bodies and responsibilities, disposal procedures, and disposal measures. In addition, the Company has installed a TMF safety monitoring system in compliance with laws and regulations to ensure real-time monitoring and surveillance of key TMF technical indicators. We also regularly carry out hazard screening inspections to ensure the safe and stable operation of TMFs.

Follow the principle of "stop inflow, and drain outflow" to treat seepage, seal leaks upstream of the dam to prevent seepage, and use filtration and Seepage treatment seepage measures to allow the seepage water to be quickly and safely discharged without taking away soil particles, so as to stabilize the situation. When the entrance of the drainage facility is blocked, personnel should be sent to remove the debris at the entrance and stay there to ensure it works properly. In the event of a collapsed drainage well, first, clean up the entrance immediately and identify the cause, then repair the well Clogged or damaged once drainage is restored. For poor drainage caused by the collapse of the drainage tunnel, if the incoming flow upstream is not strong, shut drainage facilities down to reduce the amount of water entering the reservoir and repair the collapsed tunnel; if the collapse is severe, first make proper evacuation arrangements of the people in the downstream area according to the situation, then take measures to control the dam's drainage. Sliding cracks should be treated in combination with the strengthening of the dam slope. Non-sliding cracks. For non-sliding cracks, shallow cracks or cracks in an anti-seepage section can be treated through excavation and backfill; cracks in the dam body or deep surface cracks can be **Crack treatment** treated with grouting. A combination of excavation and backfill and grouting can be used to treat medium depth cracks due to high water levels or excavation difficulties. When signs of a landslide are found, or a landslide is about to happen but has not yet collapsed, effective measures should be taken immediately to prevent further deterioration. Once a landslide occurs, reliable treatment measures should be taken to restore and reinforce the dam slope and improve the anti-collapse capability. Ensure construction safety during disposal. The basic principle of landslide treatment is to reduce load at the upper part and add weight at the lower part, i.e. to cut the slope at the main crack site and to put the weight at the foot of the dam. Minimize the reservoir water level, and open ditches along the sliding body and the nearby slope Landslide treatment to guide seepage so that the seepage water can drain quickly. If the sliding crack reaches the foot of the slope, put weight on first. When treating backwater slope landslides caused by leakage from the earth dam, the water-facing slope shall be treated simultaneously by dumping soil on the slope to prevent seepage. Before landslide treatment, the area shall be covered with waterproof materials such as plastic film, to prevent rain water from seeping into cracks. Intercepting ditches shall also be dug above the crack to divert water from the top of the dam.





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Danger may occur when the drainage facilities have been fully used but the water level continues to rise. Measures should be taken to build Anti-overflow sub-dams promptly to increase the water retaining height. In the case that the top of the dam is not wide enough and the soil quality is poor, measures an ad-hoc sub-dam can be built with earth bags. In particularly urgent situations, extraordinary measures can be taken to lower the water In the event of a flood, first stop the discharge of tailings to the TMF and increase the flow of flood discharge. If necessary, use mechanical force drainage or other measures to lower the water level in the TMF as much as possible. Mechanical equipment and vehicles can be stacked on the dam to increase dam stability. Increase the discharge of the energy dissipation pool in front of the dam to prevent rising water level from affecting dam stability through soaking the food of the dam slope. Plug, fill and compact cracks and pits to prevent further damage to the Flood prevention measures If the hazard expands and a dam collapse may occur, promptly notify people to prepare for evacuation and actively cooperate with local government authorities to organize people to evacuate and take shelter following the emergency plan of the government. When a hazard occurs, first stop the discharge of tailings to the TMF and take measures to maximize the drainage capacity of the reservoir area. Measures to prevent Mobilize personnel and vehicles to seal the cracks with sand bags, possibly with the help of mechanical equipment. At the same time, stack dam collapse gravel on the dam to strengthen dam stability, and the local government shall arrange for the immediate evacuation of people downstream.

#### Actions in Fiscal 2023

Henan Found: Installed on-line monitoring equipment for the 13th stage dam surface covering and dam surface ditch restoration project, and the 12th stage dam of the Shiwagou TMF; completed the 10th Dam surface covering and dam surface ditch restoration and the 11th dam stacking and surfacing projects of the Zhuangtou TMF; and evaluated the safety conditions of the Shiwagou and Zhuangtou TMFs.

Guangdong Found: Invested over \$96,331 to implement the TMF reinforcement project of its tailings dry yard.

Guangdong Found: Digitalized TMF safety management by adding a new daily inspection form for mechanical and electrical equipment, optimization of existing forms, and adding ten forms in the safety management system of the Eblog app, including five equipment daily inspection forms, four equipment onsite inspection forms, and one form for miscellaneous inspections.





