## **2.2** EMISSIONS MANAGEMENT

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# Waste Management

Mining waste may have negative impacts on the environment, ecology, and human health if not properly managed. Therefore, the proper disposal and efficient utilization of mining waste represent a win-win strategy for mining enterprises that aim to achieve long-term healthy growth while protecting the environment. Silvercorp strictly complies with relevant laws and regulations in China, such as the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste (GB18599-2020)*, the *Pollution Control Standards for General Industrial Solid Waste Storage and Landfill*, and the *Pollution Control Standards for Hazardous Waste Storage (GB18597-2021)*, and has formulated its own *Solid Waste Management Policy* to manage the storage, disposal, and utilization of waste generated in its operations, adhering to the principle of "maximizing comprehensive utilization". In Fiscal 2024, the Company formulated a new target of increasing the comprehensive utilization rate to 50% by 2030.

The Company implements customized management of its waste and ensures different types of waste are all properly disposed of. Waste management is a component of our environmental protection training programs, which includes education on the generation, classification, and potential hazards of different types of waste. We also actively promote waste recycling and reuse and carry out various campaigns to enhance our employees' understanding of resource recycling.

The Company formulated a new target of increasing the comprehensive utilization rate to 50% by 2030





Risks	Responses
Non-hazardous waste: retired	tires, scrap steel, household garbage, etc.
Environmental impact caused by improper storage	Household garbage is temporarily placed at designated collection facilities with sufficient containers that meet size and strength requirements. The facilities undergo regular inspections to ensure no generation or leakage of harmful gases from the garbage.
Environmental pollution and resource wastage due to non-compliant disposal methods	We contract qualified third parties, often licensed by local government authorities, for the collection and transportation of household garbage. Typically, we sign a Household Garbage Collection and Transportation Agreement with the service provider to specify the requirements for environmental protection and ensure timely and compliant disposal of garbage.
	Production material waste, such as retired tires and scrap steel, is handled by third-party service providers for recycling and reuse.
Hazardous waste: retired batte	eries, waste lubricant, etc.
Environmental pollution and health hazards caused by improper storage	We have established dedicated hazardous waste storage facilities that comply with the <i>Pollution Control Standards for Hazardous Waste Storage</i> , installing a hazardous waste networking system, and ensuring full-process supervision and management.
Ecological damage due to non- compliant disposal methods	We sign a Hazardous Waste Disposal Contract with qualified service providers to ensure proper and safe disposal of hazardous waste.
Mineral waste: waste rock, tail	ings
Improper storage of waste rock caused by natural disasters, such as collapse of waste rock storage yard or mudslides	<ul> <li>We have constructed retaining walls downstream of the waste rock yard and drainage ditches upstream and along both sides. The stacking height and slope are strictly controlled to ensure safety.</li> <li>Anti-seepage and dust-control facilities have been built around the TMFs to contain possible pollution.</li> </ul>
Improper storage of tailings due to poorly- designed TMFs	<ul> <li>For detailed information on Silvercorp's TMFs management, please refer to: Tailings Facilities Management 2.6.</li> </ul>
Resource wastage caused by non-compliant disposal methods	Some of the waste rock is used for backfilling in mining areas while the rest is processed into building aggregate materials. Waste rock not backfilled in the Ying Mining District goes to its subsidiary, Luoyang Hongfa Building Materials and Aggregates Co., Ltd. for processing. Waste rock not backfilled in the GC Mine is turned over to a contracted third-party company for crushing and use as building materials. In Fiscal 2024, Silvercorp achieved a comprehensive utilization rate of waste rock of 46.15%, which slightly decreased from the previous year due to sluggish demand for aggregate during the downturn in the real estate market.
	The GC Mine uses tailings from processing plant in backfilling. Tailings not backfilled are stored in TMFs and dry-stack tailings yards, fully complying with tailings management requirements. In Fiscal 2024, Silvercorp achieved a comprehensive utilization rate of tailings of 12.94%.

#### CASE

#### Scaling-up of the XRT Intelligent Waste Rock Screening Pilot Project

The XRT intelligent waste rock screening technology applies X-ray and image recognition technology to accurately screen out waste rock from ores. With significantly improved separation rates of ore and waste rock, less waste rock is directed to the next stage of processing, resulting in a significant reduction in chemical dosage and energy used in the processing. Accordingly, tailings are also significantly reduced, thus extending the service life of the dry-stack tailings (DST) facilities.

In November 2023, Henan Found completed the construction of the XRT intelligent waste rock screening system, which has passed the trial run stage and will officially start its industrial trial stage soon. In Fiscal 2024, Guangdong Found's intelligent waste rock screening project has already started operation, screening out 27,505 tonnes of waste rock, about 10.71% of the total amount of waste rock separated. In addition to higher separation efficiency, the XRT system also effectively reduces the operational risk of stop operators.

In Fiscal 2024, Guangdong Found's intelligent waste rock screening project screened out waste rock

27,505





# Air Quality Management 2.2.2

Dust pollution of Silvercorp comes from mines, processing plants, material storage depots, and laboratories. We strictly comply with relevant laws, regulations, and standards for air pollution control, and have formulated the *Silvercorp Dust Prevention and Control Implementation Plan* focusing on source control and comprehensive utilization. We also adopted various measures to control dust pollution, including optimizing process flows, innovating process designs, and installing dust removal equipment and facilities.

### **Dust from Mining Operations**

- Installing dust nets and fog cannons at waste rock yards to suppress dust.
- Hardening construction site ground, covering up bulk materials such as cement and sand, and installing artificial fog system at dumping sites.
- Maintaining ore transportation roads through regular cleaning up and sprinkling, installing automatic vehicle cleaning systems, and covering up the trucks of transportation.

### **Dust from Processing Operations**

- Using sealed ore stockpile facilities with artificial fog systems for dust suppression.
- Sealing up the top space of cracking and sifting workshops and using bag filters and fog systems in these workshops to suppress dust.

Silvercorp strictly monitors its air pollutant emissions in 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 conducts quarterly monitoring of both unorganized and organized waste gas emissions from its operations to ensure compliance. In addition, the Company also takes active flue gas treatment measures to further reduce its waste gas emissions.

In 2018, all mines of Silvercorp completed the transition from coal-fired boilers to electric boilers, achieving zero sulfur oxide emissions. In Fiscal 2024, the Company's emissions were as follows: nitrogen oxide totaled 696.07 tonnes, ammonia nitrogen compound measured 0.50 tonnes, and particulate matter (PM) amounted to 1.21 tonnes. The increases in nitrogen oxide and ammonia nitrogen compound emissions are mainly caused by the increased explosives use in slope development projects and tailings facilities construction during Fiscal 2024.