NEWS RELEASE

Preventing Tailings Dam Failures

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Tailings, Waste and Emissions Case Study

As the case study in the Risk Management section of this report highlights, in 2015 we began using a risk management analysis method to increase our focus on those controls that are most effective at preventing or mitigating the consequences of some of our most significant risks. In 2018, we applied this method to improve the management of our tailings storage facilities (TSFs).

As members of ICMM, we participated in the organization's working group that conducted a bow-tie risk analysis to better understand the extent and effectiveness of the critical controls required to manage high or extreme consequence events such as a tailings dam failure. This analysis was then applied to Newmont's facilities.

Because this approach requires active commitments from those directly involved with managing the risk, a cross-functional team, led by process superintendents and engineers at our operating sites, was engaged to identify the following four top critical controls that must be applied at all sites:

Monitoring instrumentation (e.g., piezometers, inclinometers and settlement points) against established threshold or trigger levels

Monitoring reclaim pond levels or elevations against the operational criteria and freeboard (i.e., the distance between the top of the water level surface and the lowest point of the crest of the dam) requirements

Completing independent geotechnical review and resolving action items

Evaluating change management triggers (i.e., design, construction or operational changes)

Through a "red/yellow/green" reporting structure, sites track if the critical control is in place and effective. If a site reports a control being at a yellow or red level, a guidance document details specific actions that must be taken. Reports are updated monthly and reported to the executive leadership team on a quarterly basis.

The establishment of critical controls for our TSFs has already resulted in greater consistency, a better understanding of data, better behaviors and improvements. For example, several sites identified non-effective critical controls related to instrumentation. As a result, sites took actions to increase instrumentation reliability and operability, develop threshold and trigger levels, and increase operator knowledge for reading instrumentation outputs related to thresholds. Many sites also recalibrated or replaced non-functioning instruments. All sites now have reliable instrumentation – which is read on a regular basis – that dynamically evaluates performance and provides early warning of potential risks.

More about Tailings, **Waste and Emissions**.