Fatal 6 - Skip wire rope failure

WHAT HAPPENED

During the 4th cycle of a concrete batch, the Plant Manager (batching remotely) heard an impact across the yard in the vicinity of the aggregate skip hoist system. After accounting for all persons on site, the Plant Manager investigated and found the wire rope supporting the aggregate skip had failed, resulting in a loaded skip falling back down its track and breaking through a guard at the bottom. The area behind the guard is not a walkway but is an area where there is pedestrian access.

An investigation following the incident revealed the following:

- The wire rope had not been inspected or replaced in the previous 18 months.
- Readymix standard for wire rope inspection is every 6 months with replacement at 12 months or 30,000m3; whichever occurs first.
- After replacing the skip rope, it was noted that the jerky movement that was there from the plant commissioning stage had disappeared. The jerky movement is likely to have placed increased stress on the wire rope behind the skip pulley mechanism.
- A relay switch and brake adjustment were both found to be outside of manufacturer's guidance.





LEARNING POINTS / ACTIONS TAKEN

- Recognising the warning signs and taking action.
- Ensure appropriate frequency of skip rope inspection, adjustment and replacement.
- Ensure inspection requirements are clear and that they are carried out by competent persons.
- Ensure relays / soft starts are operating correctly to manufactures guidelines.
- Consider potential line of fire of pedestrianised areas



LOCATION:	**READYMIX OR MORTAR PLANT**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**PRODUCTION AND PROCESSING**	**DATE ISSUED:**	**10/06/2019 13:07:08**
SUB ACTIVITY:	**READYMIX**	**INCIDENT No:**	**01513**