Karara Mining Limited Chute39+99 modification background

CH039 Chute Modification Background

The CH039 moving head chute has experienced numerous downtime events due to repeated issues with the wheel assemblies and rail weld cracking. The wheels have shown a short lifespan, primarily caused by uneven forces by the two hydraulic cylinders during operation. This uneven loading results in misalignment and excessive stress on the wheel assemblies and rail welds, eventually leading to premature failures and unplanned maintenance.

To address these ongoing issues and improve overall system reliability, it is proposed to modify the CH039 moving head chute into a fixed central chute. Converting the chute to a fixed configuration will eliminate the uneven loading from the hydraulic system, reduce maintenance frequency, and provide a long-term, stable solution for the current reliability problems.

Figure 1 Site photo

Wheels are damaged with bearing cracks.

Figure 2 Site photo

Damage on the CH39 north side rail

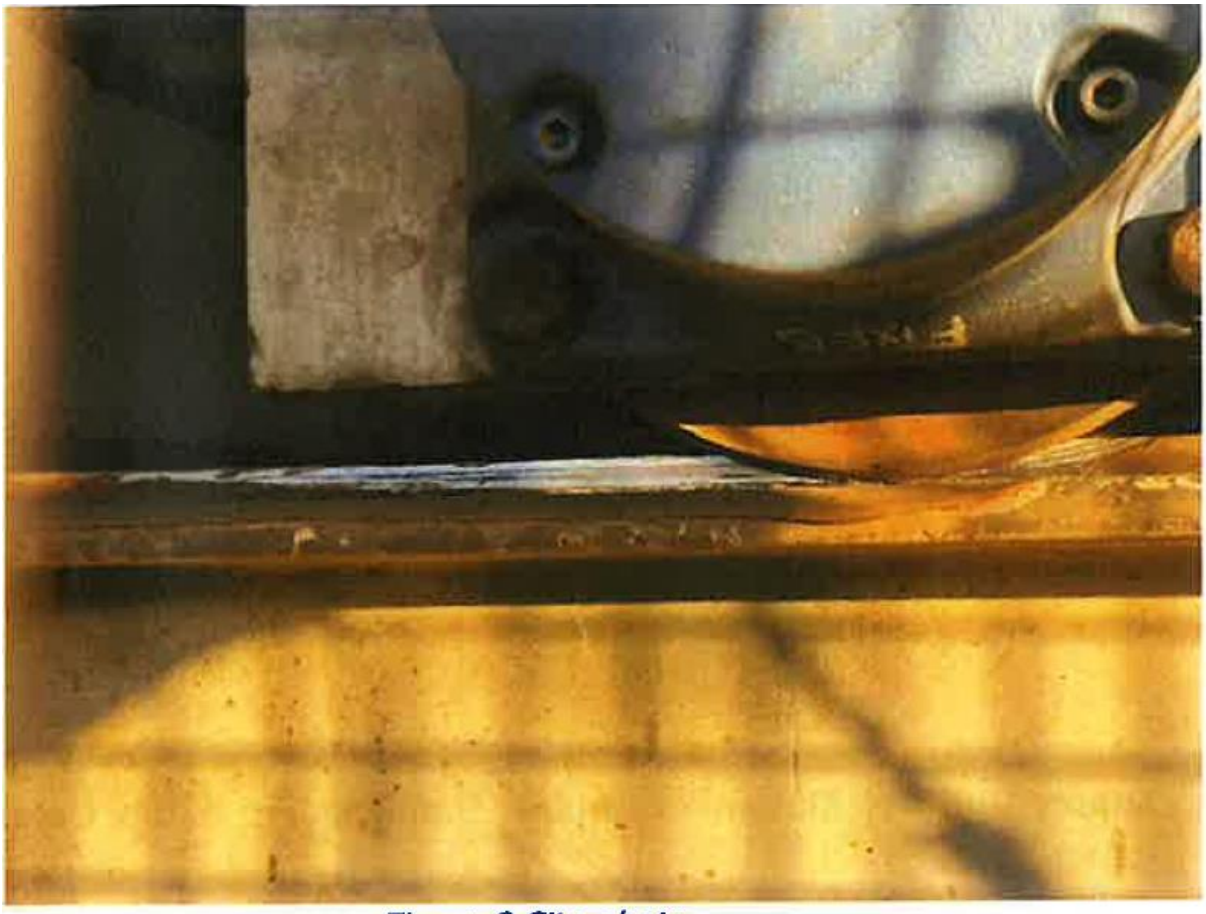

Figure 3 Site photo

CH099 Chute Modification Background

ST009 has a drafting and spillage issue. The reasons are as follows:

1) ST009 pivot pin and CH099 loading point are offset, which affects belt loading depending on the angle of slew.

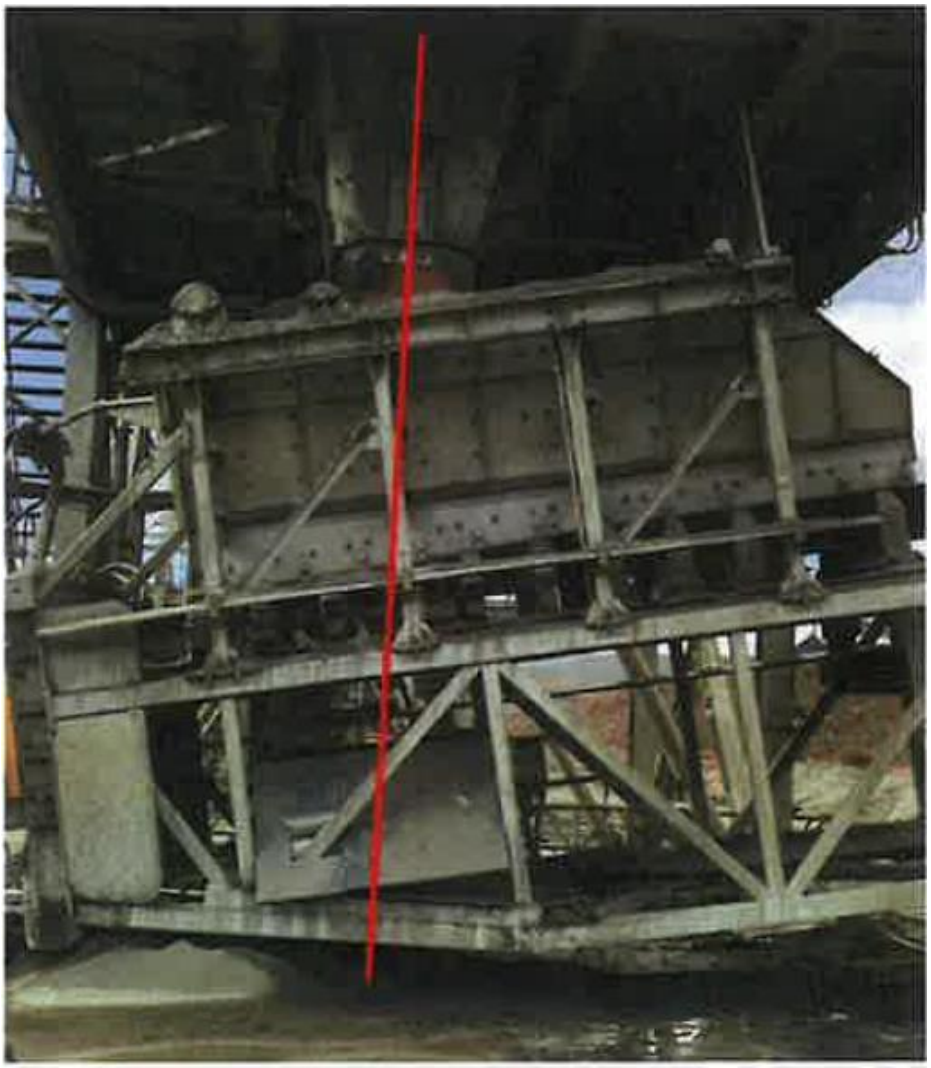

Figure 1 Site photo

2. Intermittent material build-up (rhino-horn) on the impact plate causes variances in the material flow path.

Figure 2 Site photo

3. Chute overhangs ST009 Hopper, leading to side loading and material spilling.

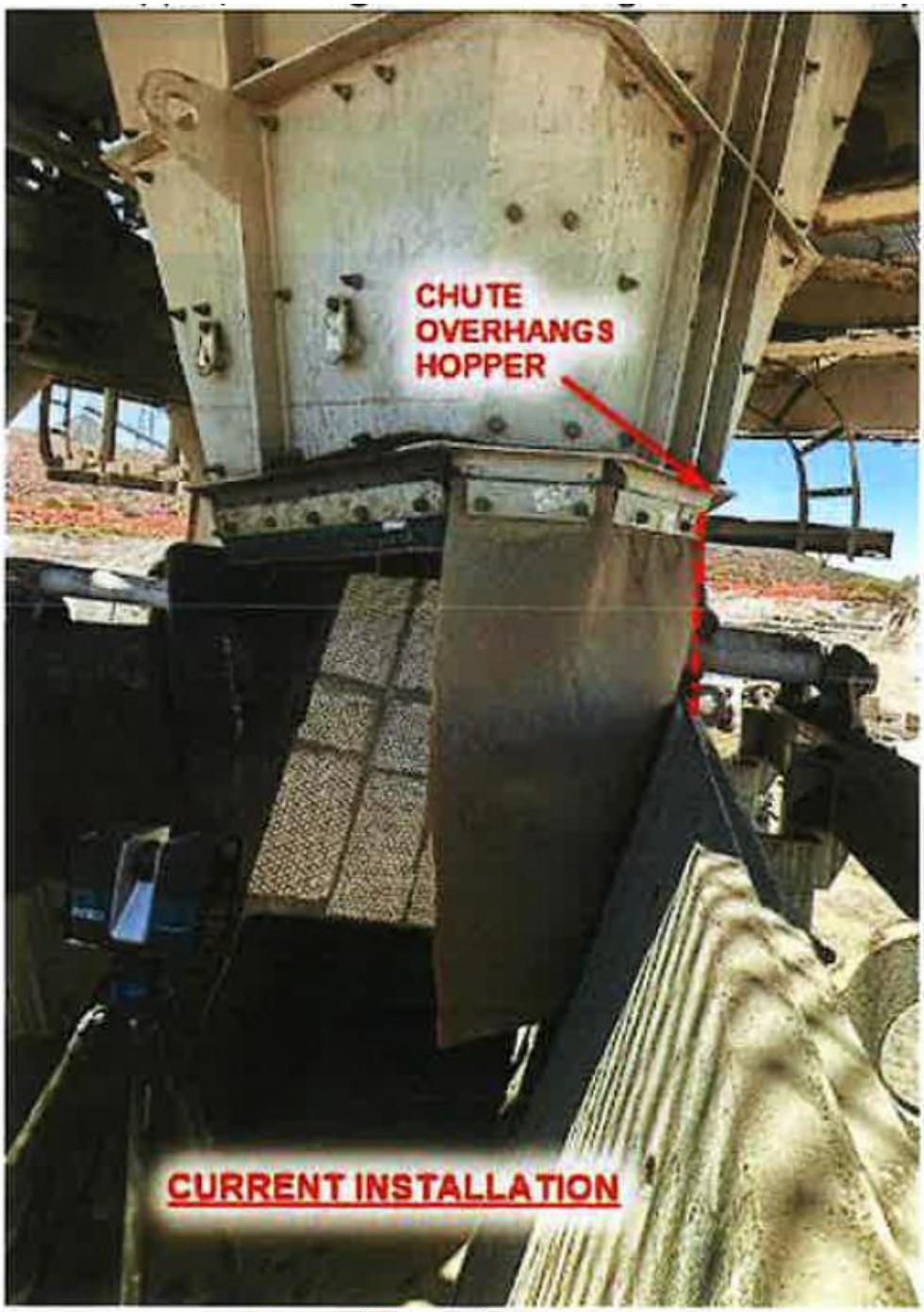

Figure 3 Site photo