Catwalk failure on mobile screener

WHAT HAPPENED

3 members of staff were changing a mesh on a mobile screener in a quarry. Whilst they were bolting in the new mesh, one of them walked around the machine on the catwalk, the floor gave way beneath his feet as he stepped from the front to the side of the machine.

The kickboard side of the catwalk had torn away from the upper support rail and he fell through the collapsed floor. He received a laceration to the back of his head which required 3 staples in A&E.

Photo 1 shows the collapsed catwalk after the incident. It is designed to fold up for transportation. Whilst this is not a new machine it was still in original condition around the catwalks. The screener was subject to regular inspection and the staff say that the catwalk was stable and gave no indication that it was likely to collapse before the incident. There was no movement, sway or bounce when it was in use.

Photo 2 shows the catwalk collapsed in on the rail that should support it.

Photo 3 shows the area where the walkway upright tore away from the support rail. Both the supports for the catwalk were damaged in the incident. A thorough examination of the other catwalk showed a hairline crack in the metal beside the weld once the paint was removed. Another screener was inspected following this incident and it was found to have a 10mm hairline tear in the steel at one of the upper supports once the paint was removed. Continued vibration during use appears to be the reason for the damage occurring.



Photo 1



Photo 2

LEARNING POINTS / ACTIONS TAKEN

- Both screeners had remedial repairs undertaken using a heavier gauge steel than the original construction to prevent future damage.
- Inspect similar equipment for defects and take remedial action where necessary.
- Amend inspection regimes to include an examination for this type of fault, where necessary.



Photo 3

LOCATION: QUARRY ALERT STATUS: Normal

ACTIVITY: MAINTENANCE & HOUSEKEEPING DATE ISSUED: 19/09/2017 14:58:53

SUB ACTIVITY: N/A INCIDENT No: 01470