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1 August 2014

Ms Carolyn Griffiths
Chief Inspector of Rail Accidents
Cullen House
Berkshire Copse Rd
Aldershot
Hampshire GU11 2HP

Dear Carolyn,

RAIB Report: Fatal accident at Halkirk level crossing, Caithness, 29 September 2009

I write to provide an update¹ on the action taken in respect of recommendation 6 addressed to ORR in the above report, published on 23 September 2010.

The annex to this letter provides details of the action taken. The status of this recommendation is now Implementation on-going. To be completed by 31 March 2015.

Yours Sincerely,

Chris O'Doherty

¹ In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

Recommendation 6

The intention of this recommendation is to cause Network Rail to change the design of long hoods so that they are more effective and to give its staff guidance on the criteria under which they should be fitted.

Network Rail should review the design of long hoods that can be fitted at level crossings and implement any necessary changes identified to make them more effective. Guidance should also be issued to its staff on the specific circumstances of site orientation and prevailing lighting so that their use is optimal.

Brief Summary on what was previously reported to RAIB on 23 December 2013

The trial was on-going and in particular to collect data from the low sun that is prevalent during the autumn and winter, and was due to conclude with all data collected and processed in January 2014.

Most trial data had been collected, with a few sites still to be reported back. Information was being collated into a Critical Review Report which, when completed, would be submitted to the Department for Transport / Highways Agency for approval.

Subject to approval comments and results from the trial, all related guidance to staff including maintainers' instructions would be revised then issued.

Update

1. On 20 December 2013 Network Rail stated that:

Tests discovered that the extended visors currently supplied by Unipart did not comply with drawing no MCX0402 figures 6b and 6c in the highways agencies standard TR0102, the template used for manufacture by Unipart Rail is from historical Grandfather Rights. Investigation also revealed a number of further sites throughout the network where independent designs had been produced locally for extended visors.

Following optical analysis by 'OptiConsulting Ltd' (OCL) an improved design of extended visor in line with the principles of the Highway Authority drawing MCX0401 figures 6b and 6C has been developed. Compliance towards Highways Agency Standard TR2206 issue A will be achieved with the successful trial at selected sites.

The installations have been completed by the local Delivery Units early this year [2013]; feedback is in the process of being sourced from LCM [Level Crossing Managers] and STMEs [Signalling & Telecoms Maintenance Engineers] responsible for the trial sites.

It is also important to note that the work under taken by 'OptiConsulting' included a full design review including the development of a number of new

designs. The new designs underwent a structured review for suitability with representatives of Network Rail and ORR present.

OptiConsulting's report concluded that one of the designs gave the optimum protection, both from the side and low setting sun (it has the good side protection of the MCX0402 and the extension of the GFR [Glass Fibre Resin] long visor).

The only visor Network Rail permitted to fit to wig-wags is visor MCX0402 for primary road traffic signals. As a result of this, Network Rail contacted the DfT and it insisted on a trial. As a priority, Network Rail will make contact with the Highways Agency Bristol office as it owns the applicable standards so Network Rail can close out the trial.

2. On 7 March 2014, in response to the ORR seeking clarity on progress being made, Network Rail stated that:

Level Crossing Wig-Wags are classed as road traffic signals. The standards for road traffic signals are owned by the Department for Transport Highways Agency. Any new design of visor must be agreed with the Highways Agency and potentially incorporated into their suite of standard drawings. Several new designs of visor were developed and tested in laboratory conditions and viewing trials by OptiConsulting. The optimum solution of a hybrid visor was selected and taken forward for product acceptance.

Understanding at the time was that the Highways Agency required an operational trial of the new hood design even though Network Rail had followed a robust off-site testing process. The recommended design has been installed under a Trial Product Acceptance Certificate at several sites with the first visors installed spring 2013. Analysis of feedback from maintainers at these sites, and the earlier off-site testing demonstrates that the visors are fit for purpose.

Network Rail therefore concludes that it would now be able to issue full product acceptance for the design currently on trial, but it is unable to do so until the Highways Agency has accepted the design. Network Rail is awaiting feedback from the Highways Agency regarding the acceptance of the new visor. This process is not in Network Rail's control; therefore it is not possible to determine a timescale for completing this activity.

Until agreement has been reached with the Highways Agency, the new visor will remain under trial certification and the sites will continue to be monitored. Whilst Network Rail waits for a decision from the Highways Agency, Network Rail will be developing the guidance for its staff. This will include specifications for the criteria where the long visor is appropriate to mitigate for the risks of sunlight swamping.

Once product acceptance has been granted from the Highways Agency, Network Rail will be able to finalise its own product acceptance and formally end the trial. At this time, any existing long hoods installed on wig-wags that

do not conform to the required standard will be identified and replaced with the product accepted replacement.

Network Rail will update the ORR on progress for this recommendation every three months until it is complete.

3. On 22 May 2014, Network Rail stated that:

Signal Maintenance Specification SMS LC11 has been updated to include maintenance checks for sighting issues of level crossing wig wag units. These requirements were originally detailed as action points in Notice Board NB122. LC11 was published on 03 March 2013 with a compliance date of 07 September 2013, with national briefing being carried out in August 2013. In order to close this recommendation, it is proposed to place the remaining guidance from NB122 into SMS publication LC00 as an appendix. The update to LC00 will be published on 06 September 2014, with compliance date of 07 March 2015, which allows for a complete maintenance cycle to complete.

ORR Decision

4. Network Rail has committed to update ORR at intervals of 3 months on the redesign and product acceptance of long hoods; we expect to receive a further update by end of August 2014.

ORR will write to RAIB if it becomes aware that the information above is inaccurate.

Status: Implementation on-going. To be completed by 31 March 2015