Oliver Stewart
Senior Executive, RAIB Relationship and Recommendation Handling
Telephone 020 7282 3864
E-mail oliver.stewart@orr.gsi.gov.uk

21 August 2018

Mr Andrew Hall
Deputy Chief Inspector of Rail Accidents
Cullen House
Berkshire Copse Rd
Aldershot
Hampshire GU11 2HP

Dear Andrew,

RAIB Report: Derailment of a freight train near Langworth, Lincolnshire, 30 June 2015

I write to provide an update[1] on the action taken in respect of recommendation 2 addressed to ORR in the above report, published on 24 June 2017.

The annex to this letter provides details of the action taken regarding the recommendation, the status of which is now '**Implemented**'. We do not propose to take any further action in respect of the recommendation, unless we become aware that any of the information provided becomes inaccurate, in which case I will write to you again.

We will publish this response on the ORR website on 22 August 2018.

Yours sincerely,

Oliver Stewart

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

Recommendation 2

The intent of this recommendation is to reduce the risk of track buckles by enabling the consistent application of Network Rail's procedure for the calculation of critical rail temperatures, with sufficient account taken of all relevant factors.

Network Rail should:
a. assess whether the descriptors of ballast shortage conditions in its current standards and guidance require further clarification to enable consistent calculation of critical rail temperatures. The review should also include an evaluation of whether additional allowances should be made for combinations of conditions, such as localised ballast shortage in switches and crossings (particularly around point motor bearers), sub-intervention level misalignments and any maintenance that could have affected the stress free temperature; and
b. develop a programme to deliver any actions arising from the review, including amendments to standards and rebriefing of track maintenance staff, to meet the intent of the recommendation.

ORR decision

1. Network Rail has reviewed the descriptors in their track standards for ballast deficiency and found the existing information to be satisfactory. Network Rail has rebriefed the information to appropriate staff (TME's and RAM(T)'s) as part of a briefing pack that includes photos of different example of good and bad practice.

2. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

- taken the recommendation into consideration; and
- taken action to implement it.

Status: Implemented.

Previously reported to RAIB

3. On 6 November 2017 ORR reported that we asked Network Rail to confirm that the review of materials covering hot weather preparation referred to in their response had been completed and timescales for any further work identified. At the time of reporting Network Rail have not yet done this. We also asked Network Rail for conformation that the Hot Weather Briefing has been completed and briefed to staff, as the response indicated this would be done by 8 December 2016.

Update

4. On 28 March Network Rail provided a closure statement and supporting document containing the following summary:

The Chief Track & Lineside Engineer has considered this action and addressed the intent of the recommendation by:

a) reviewing existing documented company descriptors for the ballast deficiency; and

b) providing a briefing pack which uses photographs to link actual site conditions to the descriptors in NR/L2/TRK/001/mod14.

• In NR/L2/TRK/001/mod14 the combination of Figure 1 with Table 5 for CWR track and Figure 2 with Table 9 for jointed track provides good descriptors of ballast deficiency.

• NR/L2/TRK/001/mod14 Table 2 draws attention within the notes for the requirement for wider shoulders around any discontinuity. This includes abutting toes in S&C.

• To provide some guidance on this subject, a briefing presentation has been produced which relates a described deficiency in Figure 1 to a photograph showing an example of that particular deficiency.

• This brief has been delivered by STE to Track Maintenance Engineers and Section Managers at two Hot Weather Summits (9/11/2017 and 20/02/2018) and to Route Asset Managers [Track] at a Quarterly Standards brief (December 2017).

Conclusion

The Chief Track & Lines ide Engineer has considered the purpose of the Recommendation and has acted appropriately to address the underlying issues identified from the recommendation.

The relevant documents have been updated and briefing cascades completed with focus on the track maintenance community. Access to these documents is via the Network Rail Portal and they are available for reference.

In view of the actions taken the intent of this recommendation has been met and therefore considered CLOSED.

Previously reported to RAIB

Recommendation 2

The intent of this recommendation is to reduce the risk of track buckles by enabling the consistent application of Network Rail's procedure for the calculation of critical rail temperatures, with sufficient account taken of all relevant factors.

Network Rail should:
a. assess whether the descriptors of ballast shortage conditions in its current standards and guidance require further clarification to enable consistent calculation of critical rail temperatures. The review should also include an evaluation of whether additional allowances should be made for combinations of conditions, such as localised ballast shortage in switches and crossings (particularly around point motor bearers), sub-intervention level misalignments and any maintenance that could have affected the stress free temperature; and
b. develop a programme to deliver any actions arising from the review, including amendments to standards and rebriefing of track maintenance staff, to meet the intent of the recommendation.

ORR decision

5. As per recommendation 1, we asked Network Rail to confirm that the review of materials covering hot weather preparation referred to in their response has been completed and timescales for any further work identified. Network Rail have not yet done this.

6. We have also asked for conformation that the Hot Weather Briefing has been completed and briefed to staff, as the response indicated this would be done by 8 December 2016.

7. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

- taken the recommendation into consideration; and
- is taking action to implement it, subject to completion of their time-bound plan.

Status: Implementation ongoing. **ORR will advise RAIB when actions to address this recommendation have been completed.**

Information in support of ORR decision

8. On 2 November 2016 Network Rail provided the following initial response:

To satisfy this recommendation Network Rail will review all current hot weather management controls and guidance to identify any gaps in requirements.

Where gaps are identified the existing controls will be revised and changes re-briefed.

The recommendation will be addressed through the following stages:

1. *Review materials covering hot weather preparation, including specific assessment of the content covering ballast shortage descriptors and combinations of high buckle risk conditions. Materials to be reviewed will include:*
   a. *Network Rail standards (NR/L2/TRK/001)*
   b. *Business Critical Rules controls (Track Buckle Bow Tie, Means of Control)*
   c. *Track Work Information sheets*
      NR/GN/TRK/7001/TWI2G002, 2G017, 2P013
      NR/GN/TRK/7001/TWI3G026, 3G031, 3P013, 3P017
   d. *TME training course*
   e. *Other guidance material, e.g. Hot Weather Blue Book (ref 8000/1)*

   Target completion date: 30 Sept 2016

2. *Prepare a Hot Weather Briefing, to be delivered annually to all TMEs, Section Managers [Track] and Section Supervisors by mid-January each year. The briefing will reiterate the importance of stress reinstatement, in particular around S&C components (to address Rec 1) and will clarify current descriptors for ballast shortage and combinations of track conditions that affect buckle risk / SFT.*

   Target completion date: 30 Nov 2016

3. *Deliver briefing at December Track Quarterly Standards Briefing for onward cascade by RAM[T]s.*

   Target completion date: 8 Dec 2016

4. *If necessary based on the findings from step 1, update, publish and brief modified documents to all those carrying out hot weather management*

   Target completion date: 30 Sept 2017

   The action plan is to include a period after completion of step 4 for production, review and sign-off of the closure statement.

   Overall target completion date: 30 November 2017