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

Dear Andrew,

RAIB Report: Train collision with material washed out from a cutting slope at Corby, Northamptonshire on 13 June 2019

I write to report¹ on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 26 May 2020.

The annex to this letter provides details of actions taken in response to the recommendations and the status decided by ORR. RAIB addressed Recommendation 1 to the Environment Agency. The status of recommendations 2, 3 & 5 is '**Progressing**'. The status of recommendation 4 is '**Implemented**'.

ORR will advise RAIB when further information is available regarding actions being taken to address these recommendations.

We will publish this response on the ORR website on 25 May 2021.

Yours sincerely,



Oliver Stewart

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

Initial consideration by ORR

1. Recommendations 2 – 5 were addressed to ORR when the report was published on 26 May 2020. RAIB addressed Recommendation 1 to the Environment Agency.
2. After considering the recommendations ORR passed recommendations 2 - 5 to Network Rail and recommendation 4 to the Rail Delivery Group asking them to consider and where appropriate act upon them and advise ORR of its conclusions. The consideration given to each recommendation is included below.
3. ORR also brought recommendations 4 & 5 to the attention of TOCs and Charter Operators as it was concluded that that there are equally important lessons for them. ORR did not ask these organisations to provide a reply.
4. This annex identifies the correspondence with end implementers on which ORR's decision has been based.

Recommendation 1

The intent of this recommendation is that the owners of the surface water drainage assets that form the flood management system at Pen Green Lane, Corby, cooperate to reduce the risk of flooding on the railway in that area, both in the short and long term.

The Environment Agency should, in conjunction with Northamptonshire County Council, Anglian Water, Homes England, Corby Borough Council and Network Rail, lead the production of a timebound plan to implement and maintain an effective flood management system at Pen Green Lane, Corby. The plan should take into consideration short and long- term actions to address the system's susceptibility to blockages and the limitations of the ponds to store water

ORR decision

5. The recommendation was directed by RAIB directly to the Environment Agency. Accordingly, no action has been taken in respect of it by ORR, although we retain an interest in its outcomes.

Recommendation 2

The intent of this recommendation is to manage the risk of washouts or landslips on railway infrastructure at specific locations that could endanger trains due to the flooding of adjacent land, following rainfall which falls below the threshold of Network Rail's adverse/extreme weather plans.

Network Rail should:

- a) compile a list of locations on or around its infrastructure where it is known that surface water flooding with the potential to affect railway safety occurs during normal levels of rainfall (that is, during rainfall events that are not classified by its weather management processes as adverse/extreme weather)

- b) review the adequacy of the flood management arrangements in place at the locations listed in (a)
- c) identify the organisations responsible for each of the assets that form part of a relevant flood management system or could affect flood related risk to the railway at the locations listed in (a)
- d) take steps to establish lines of communication with the organisations identified in (c) to set up joint studies to establish how the risk due to surface water flooding can be reduced at these locations

ORR decision

6. Network Rail has provided an action plan for compiling a list of locations where surface water flooding with the potential to affect railway safety occurs during normal levels of rainfall, and to implement the requirements of the recommendation at those locations. The plan was submitted in September 2020, and we have asked Network Rail to report on progress as some of the milestone dates have now passed.

7. We note that different approaches are being taken by different routes, but believe the core purpose is delivered by each. We have also asked Network Rail how the Technical Authority will monitor progress by individual routes and to identify a single point of contact for the recommendation.

8. 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

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

9. On 17 September 2020 Network Rail provided the following initial response:

Please find attached a copy of the Network Rail response to recommendation 2 of RAIB Report – Train collision with material washed out from a cutting slope at Corby, Northamptonshire 13 June 2019.

For information the national tracker is being held by the Professional Head of Asset Protection, Drainage & Off-Track which will be updated with site information and action close out. The recommendation and plan will be reviewed at regular meetings with the regions, with Technical Authority Engineers being responsible for recording and chasing updated.



Corby Rec 2
National Action Plan

Recommendation 3

The intent of this recommendation is to enable more effective management of the short-term risk to earthworks while waiting for planned work to take place in the longer term, when mitigations using geotechnical instrumentation are not viable options.

Network Rail should review, and amend as necessary, its processes for the management of earthworks, so that its staff responsible for earthworks are trained and have clear guidance on when and how to trigger appropriate monitoring and/or other short-term mitigations. This is particularly relevant when mitigations using geotechnical instrumentation are not viable options and actions that involve other functions within Network Rail or external organisations are needed instead

ORR decision

10. We have reviewed the plan to address the recommendation provided by Network Rail. Following further discussions with Network Rail and we are content with the approach being taken. We are monitoring progress against this recommendation in conjunction with that for Willesden Junction recommendation 3, which covers similar issues. We have asked Network Rail if they are confident that any changes to standards will be completed by 31 October 2021 (and if not, what the target date is) and what arrangements are in place for ongoing monitoring of implementation.

11. 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

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

12. On 22 August 2020 Network Rail provided the following initial response:

Network Rail will initially review the following documents:

- *NR/L2/CIV/086: Management of Earthworks Manual*
- *NR/L2/CIV/086/Mod01: Earthwork Evaluations*
- *NR/L2/CIV/086/Mod04: Earthwork Interventions*
- *NR/L2/CIV/086/Mod05: Earthwork Mitigations*
- *NR/L2/CIV/086/Mod09: Earthworks Adverse / Extreme Weather Risk Assessment*
- *Selection of regional / route deferred renewal registers*
- *Proforma within NW&C produced to document decision making for mitigations*

The review will identify where there are potential deficiencies in the provision of clear guidance on when and how to trigger appropriate monitoring and / or short-term mitigations. In addition, local documents will be reviewed to identify best practice in recording the decision making of mitigations to provide line of sight from evaluation.

The recommendation focuses on short-term mitigations involving other functions (as geotechnical instrumentation are not always viable options because of deployment time). Noting this we will review guidance on the use of rapidly deployable mitigations (e.g. watchmen, tiltmeters) and alignment between Mod 01, 05 and 09 of the earthwork's manual.

Evidence required to support closure of recommendation

- *Conclusions from the documentation review and feedback from the geotechnical community throughout Network Rail via the Asset Technical Review (ATR).*
- *If deemed necessary from the review, an example proforma will be included into an appropriate section of the 086 manual or one of the accompanying modules. This may include a table to illustrate different failure modes (and speed) and the applicability of mitigations to manage risk. Any changes to standards would be briefed accordingly.*

Recommendation 4

The intent of this recommendation is to better enable the safe and effective detrainment of passengers by understanding what equipment needs to be available for train evacuations.

As part of the ongoing industry-wide programme of work to improve the management of stranded passenger train incidents, Network Rail and the Rail Delivery Group should carry out a joint review of existing procedures and codes of practice for managing stranded trains and carrying out train evacuations, to identify what equipment is needed to deliver the requirements in these procedures for each method of train evacuation. They should then provide this information about what equipment is needed to those responsible for the implementation of recommendation 5

ORR decision

13. Network Rail and RDG have reviewed and update the existing guidance document for managing the needs of passengers when trains are stranded. Network Rail has also updated its relevant National Operating Procedure.

14. RDG and Network Rail have jointly issued two new guidance notes that deal with management of stranded trains and evacuation: *Meeting the Needs of Passengers Stranded on Trains* (RDG-OPS-GN-049) and *Train Evacuation Equipment and its Deployment* (RDG-OPS-GN-050).

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

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

Status: Implemented.

Information in support of ORR decision

16. On 22 August 2020 Network Rail provided the following initial response:

Network Rail, in conjunction with the Rail Delivery Group, will continue the review of the industry guidance and Network Rail National Operating Procedure for stranded trains. The industry guidance and National Operating Procedure will be published on the respective document sites by 30 November 2020.

The review of the documents will include the identification of equipment used for train evacuation through a knowledge search across industry. The knowledge search will be completed by 31 December 2020.

Details of the potential equipment will then be made available, in the form of a new guidance note, on a knowledge hub to allow each Railway Undertaking to determine the most effective method of train evacuation as outlined in recommendation 5. The information will be available on the knowledge hub by 31 January 2021.

Evidence required to support closure of recommendation

- Updated RDG guidance on the management of stranded trains.
- Updated National Operating Procedure for the management of stranded trains.
- New RDG guidance on the equipment that may be used to enable train evacuations.
- Evidence the three documents have been published or made available to industry.

17. On 3 March 2021 Network Rail sent the following timescale extension to 31 July 2021:



Corby Rec 4.pdf

18. On 20 August 2020 the Rail Delivery Group provided the following initial response:

As the RAIB acknowledges, RDG and Network Rail are already engaged in a cross-industry programme. A key element of this is the review and updating of our joint Guidance Note SP01 Meeting the Needs of Passengers Stranded on Trains. The target date for publication of the revised version of this is 30 November 2020 and will become joint Guidance Note 49.

In parallel, we have been conducting a wider knowledge search. This draws on relevant documents and arrangements in place across the industry, including identification of equipment used for train evacuation, and is expected to be completed by 31 December 2020.

Details of the identified equipment will then be made available in the form of a new Guidance Note which is expected to be published by 31 January 2021. The aim of this will be to support each railway undertaking, working in conjunction with Network Rail, in determining the most effective method of train evacuation based on its particular circumstances (type of rolling stock operated, number and training of on-board staff, etc.), as outlined in recommendation 5.

Please note that all the above dates are indicative – the impact of Covid-19 extends to the TOC colleagues we are working most closely with on the management of passengers stranded on trains work programme, many of whom are also their organisation’s Covid-19 lead.

19. On 10 May 2021 Network Rail provided the following closure statement:

The industry-wide programme of work to improve the management of stranded passenger train incidents has delivered guidance and information to industry. The development of the guidance for the evacuation equipment has now been delivered and shared across industry through the RDG and across Network Rail by the Head of Operations. Work had already been completed on the stranded train guidance and the corresponding National Operating Procedure. The stranded train guidance and National Operating Procedure were briefed to industry at a colloquium. The stranded train guidance was sent to industry and across Network Rail.

Network Rail and the Rail Delivery Group have now completed a joint review of existing procedures and codes of practice for managing stranded trains and carrying out train evacuations, and identified what equipment could be used to deliver the requirements in these procedures for each method of train evacuation.

The information has been provided to industry on the equipment that should be considered by those responsible for the implementation of recommendation 5.

The recommendation is closed with a requirement for the train operators in conjunction with the Regions to complete the actions in recommendation 5.

As part of the annual closed recommendation audit later in 2021/22 the implementation of recommendation 5 will be reviewed.

Meeting the Needs of Passengers Stranded on Trains (RDG-OPS-GN-049)



RDG-OPS-GN-049 -
Meeting the Needs

Train Evacuation Equipment and its Deployment (RDG-OPS-GN-050).



RDG-OPS-GN-050_T
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Recommendation 5

The intent of this recommendation is to better enable the safe and effective detrainment of passengers by making equipment available for train evacuations.

Upon completion of recommendation 4, as part of the ongoing industry- wide programme of work to improve the management of stranded passenger train incidents, Network Rail should:

- a) take steps, in cooperation with the train operating companies, so that the equipment identified as required for managing stranded trains and train evacuations is available for use when needed (such as on specific types of train or placed at strategic locations along each route)
- b) brief and/or train its staff involved in managing or responding to stranded trains and train detrainments on how to get the equipment made available in (a) to the site of a stranded train and how to use it correctly once it is there
- c) work with each train operating company to prepare rolling stock specific guidance so that each train operating company can brief and/ or train its staff involved in managing or responding to stranded trains and train detrainments on what to expect when this equipment is to be used to evacuate passengers from its trains

ORR decision

20. Once the RDG guidance referred to in recommendation 4 has been published we will ask each TOC to review their evacuation procedures taking into account the new guidance. We will also write to Network Rail to state that we expect them to cooperate with individual TOCs, although we accept that they should not lead on this.

21. 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

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

22. See information in support of recommendation 4.