

Chris O'Doherty RAIB Relationship and Recommendation Handling Manager Telephone: 020 7282 3752 e-mail: chris.o'doherty@orr.gsi.gov.uk

15 January 2013

Ms Carolyn Griffiths Chief Inspector of Rail Accidents Rail Accident Investigation Branch Block A, 2nd Floor Dukes Court Dukes Street Woking GU21 5BH

Dear Carolyn

## Derailment of a passenger train near Dryclough Junction, Halifax, on 5 February 2011

I write to report<sup>1</sup> on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 20 October 2011.

The annex to this letter provides details of the consideration given/action taken in respect of each recommendation where all 5 recommendations have been implemented<sup>2</sup>.

We do not propose to take any further action in respect of these recommendations unless we become aware that any of the information provided becomes inaccurate, in which case I will write to you again<sup>3</sup>.

We expect to publish this response on the ORR website on 29 January 2013.

Yours Sincerely

Chris O'Doherty



<sup>&</sup>lt;sup>1</sup> In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

<sup>&</sup>lt;sup>2</sup> In accordance with Regulation 12(2)(b)(i)

<sup>&</sup>lt;sup>3</sup> In accordance with Regulation 12(2)(c)

1. All recommendations contained in the report were addressed to ORR when RAIB published its report on 20 October 2011.

2. After considering the report / recommendations we passed the 5 recommendations to Network Rail, asking them to consider and where appropriate act upon them.

3. Details of the consideration given and any action taken, in respect of each recommendation is provided below.

4. ORR also brought the report to the attention of Nexus (Tyne and Weir Metro), London Underground Ltd, HS1 Ltd, Docklands Light Railway, London Overground Infrastructure and the Heritage Rail Association and UK Tram Ltd to bring to the attention of their members, as it was concluded that there are equally important lessons for them. ORR did not ask these organisations to provide a reply.

# Recommendation 1

The purpose of this recommendation is to improve control of minor civil engineering works schemes to ensure that changes to the design made during the implementation phase do not compromise the effectiveness of the works.

Network Rail should review its arrangements for controlling the implementation of minor civil engineering works. This should include consideration of how deviations from the design are identified, assessed and accepted, and by whom, so that the original intent of the civil engineering work is not compromised. Any necessary improvements should be implemented.

## Details of steps taken or being taken to implement the recommendation

5. Network Rail in its response of 27 January 2012 advised ORR that:

A review of the existing end-to-end processes surrounding delivery on Minor civil engineering works will be undertaken and any necessary improvements implemented.

This will be undertaken as part of the B&C Transformation project.

The output of this work is anticipated to have negligible impact on the cost of delivering schemes.

Timescale: 31 July 2012.

6. ORR, in reviewing this response, concluded that the response lacked sufficient detail to demonstrate that Network Rail has adequately addressed the recommendation. ORR therefore wrote to Network Rail on 21 February 2012 requesting sight of the outcomes of the review; including reasoning, conclusions and any actions to be taken, to address this recommendation, including any associated timescales.

7. Network Rail in its response of 3 September 2012 advised ORR that:

Network Rail has reviewed the scope and associated processes for control of civil engineering works to structures contained within the current applicable standards.

Network Rail does not believe there are any immediate changes required to the processes as described in the standard – Network Rail current standards adequately cover the issue.

However, Network Rail will ensure the requirements for controlling on site works and capturing approval of design change are re-briefed making specific reference to the Halifax [Dryclough] incident.

Network Rail has produced a quick reference flow chart which clearly shows the process for obtaining design approval for change. This has been briefed to the Route Asset Managers for dissemination to the Property and Civils Minor Works delivery teams within the routes. The briefing and flowchart reinforces the need to control design change during the implementation phase of the works and to obtain correct review and approval of design change.

## **ORR Decision**

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

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

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

#### Status: Implemented

# **Recommendation 2**

The purpose of this recommendation is to provide Network Rail staff with a means to identify structures whose examination has been missed or has not been loaded into CARRS [Civil Asset Register and electronic Reporting Register] and define how they should deal with the risks this may pose. The system should also assist in preventing examinations from being missed.

Network Rail should implement a process that:

- identifies and highlights structures examinations that are overdue, or whose examination report has not been effectively transferred to Network Rail's computer system;
- defines what action is to be taken regarding these missing examination reports; and
- identifies and highlights structures whose examination due date is imminent but no examination has been scheduled.

#### Details of steps taken or being taken to implement the recommendation

9. Network Rail in its response of 27 January 2012 advised ORR that:

This is being addressed as part of tactical solutions following the national structural examinations improvement notice. This is funded within the transformation budget.

Timescale: 30 April 2012.

10. ORR, in reviewing this response, concluded that the response lacked sufficient detail to demonstrate that Network Rail has adequately addressed the recommendation. ORR therefore wrote to Network Rail on 21 February 2012 requesting further details on how the 'tactical solutions' will address the recommendation, including any associated timescales.

11. Network Rail in its response of 13 June 2012 advised ORR that:

Network Rail has produced a system accessible by all routes called 'The Bridge'. This system identifies compliance dates for all structure examinations across the network. The system prompts for a risk assessment to be carried out on all examinations which are non-compliant, or where the planned date of the examination is beyond the compliance tolerance date. The risk assessments are stored on the system with a review date which allows them to be reassessed if required.

## **ORR Decision**

12. The ORR as part of its inspection work, to confirm Network Rail had complied with Improvement Notice I/303293339/JPMcG to put in place suitable and sufficient measures to ensure that non-earthworks structures were fully examined and reports of these examinations were evaluated at appropriate intervals to ensure the structures remain safe, was satisfied that the introduction of the system known as 'The Bridge' meets the requirements of the recommendation.

13. After reviewing all the information received from Network Rail together with the inspection activity to confirm Network Rail had complied with the Improvement Notice, ORR concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

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

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

## Status: Implemented

# **Recommendation 3**

The purpose of this recommendation is to increase the likelihood of long running or significant defects in a structure being identified by the engineers responsible for its management.

In conjunction with its examination contractor, Amey, Network Rail should review the effectiveness of the existing structures examination regime and implement any changes found necessary. The review should include, as a minimum:

- consideration of why examiners do not always report persistent defects; and
- a consideration of whether the examination system should be enhanced to require supervisors and/or engineers to periodically inspect structures.

## Details of steps taken or being taken to implement the recommendation

14. Network Rail in its response of 27 January 2012 advised ORR that:

This recommendation will in part be closed via the implementation of the new national structures defect tracker. The second item will be addressed through the B&C Transformation programme over the 5 months.

Timescale: 30 June 2012.

15. ORR, in reviewing this response, concluded that the response lacked sufficient detail to demonstrate that Network Rail has adequately addressed the recommendation. ORR therefore wrote to Network Rail on 21 February 2012 requesting further details on how the 'national structures defect tracker' and the 'B&C Transformation Programme' will address the recommendation, including any associated timescales.

16. Network Rail in its response of 10 July 2012 advised ORR that:

Network Rail has undertaken a review of its examination process in the context of this recommendation.

The visual examination process has been enhanced through the incorporation of a 'Defect Tracker'. There is now a system embedded in the exam report that prompts the examiner to update the status of significant defects e.g. repaired, no changes or deteriorated.

Over-and-above this Amey has advised that where perceived safety issues exist; these are highlighted as recommendations irrespective of previous reports.

Defect Tracking is included in the current Amey technical briefings.

The review confirms that Amey has a programme of technical audits. The technical audit is undertaken on site generally with the examiner present. It compromises of an End Product Check on Detailed Examinations, inclusive of BCMI [Bridge Condition Marking Index] and an End Product Check or an Observation of Visual Examinations. Two Detailed Examinations and six Visual Examinations (which may include Additional Examinations) are audited per examiner.

Over the last couple of years Network Rail has implemented a programme of engineering verification which also includes a review of the adequacy of examinations.

In light of the above, no immediate change is considered necessary, especially when viewed in conjunction with the new Defect Tracker.

## **ORR Decision**

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

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

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

## Status: Implemented

# **Recommendation 4**

The purpose of this recommendation is to provide support to the MPCs to allow them to determine who is best placed to deal with problems reported via community relations concerning structures and earthworks and to define a system, including time limits, so that structures and earthworks staff can correctly prioritise their work.

Network Rail should put in place adequate arrangements for dealing with external reports on possible problems with its structures and earthworks, and provide appropriate training and guidance to its community relations staff (including MPCs [Maintenance Protection Co-ordinator]). The arrangements should include guidance on appropriate response times for both community relations and structures and earthworks staff when dealing with these reports, the basis upon which the reports should be prioritised and a system to ensure that defects identified are followed through.

## Summary

18. Within the existing National Helpline Emergency Call Process Network Rail issued additional guidance to its community relations teams providing clarification on what defines a retaining wall and a culvert. This helped the team use the correct codes that fall within each problem type (e.g. structures, earthworks) so the query can be addressed to the correct personnel and closed efficiently.

19. Network Rail also put in place a tool for tracking incoming reports from external parties which addresses the risk associated with the timely close out of incoming reports from Community Relations and MPC's in the short term.

20. Network Rail issued a Service Request Log Tracking Tool (SRLTT) to all Routes to standardise the process for logging and tracking correspondence from community relation teams. Single Points of Contact (SPOC) have been established within the routes to co-ordinate community relations issues.

21. The processes and systems developed were then incorporated into the Buildings and Civils Transformation Programme to ensure a robust approach was embedded into Network Rail's business. A guidance document defining when/how to use the tool was also issued nationally.

22. A proposed interface system, the 'Community Relations Response Tool', to replace the current processes for recording, prioritising, tracking and closing out cases, is being developed as a module within the Civil Structures Assessment and Management System (CSAMS).

23. Further detail is provided below

#### Details of steps taken or being taken to implement the recommendation

24. Network Rail in its response of 27 January 2012 advised ORR that:

A system for dealing with external reports and tracking actions through to completion will be developed and implemented in March 2012.

# A short briefing pack for Community Relations and MPC's will be prepared and briefed May 2012.

## *Timescale: 30 June 2012.*

25. ORR, in reviewing this response, concluded that the response lacked sufficient detail to demonstrate that Network Rail has adequately addressed the recommendation. ORR therefore wrote to Network Rail on 21 February 2012 requesting that it explains what it is doing to assure that it has adequate arrangements in place and provides adequate training and guidance to relevant staff for dealing with external reports on possible problems with its structures and earth works.

26. Network Rail in its response of 23 March 2012 advised ORR that:

A full review will be undertaken of the processes in Community Relations for the assignment of incoming civils reports. A briefing pack providing further clarification on the definitions and responsibilities associated with civils assets will be supplied to Community Relations and MPCs. These actions will be completed by May 2012.

A tool for tracking incoming reports from external parties has been developed and is currently being trialled in LNE. This trial will be reviewed by the end of March 2012 and improvements in the tool and the processes carried out before rolling out nationally in April 2012.

The above will address the risk associated with the timely close out of incoming reports from Community Relations and MPC's in the short term. The processes and systems developed will be incorporated into the Buildings and Civils Transformation Programme to ensure a robust approach is embedded in the business.

ORR, in reviewing this response, concluded that the response showed that Network Rail was moving in the right direction to address the recommendation. ORR wrote to Network Rail on 16 April 2012 requesting an update on progress.

27. Network Rail in its response of 14 May 2012 advised ORR that:

#### **Community relations**

Below is a brief summary of the process that is already in existence:

There are documents in place, "National Helpline Emergency Call Process" and "National Helpline Call Process" that detail the process that takes place when receiving a call at our National Helpline. The document "Quick reference guide 2012" details the problem types of issues community relations teams receive and how these should be handled.

Any new staff members joining the community relations team undergo a full comprehensive training period of 2 weeks with additional 3 weeks grad bay monitoring [A 3 week period where new community relation staff members are monitored and mentored]. Throughout this process the number one priority embedded into training is safety and making sure all agents act on the side of caution. They are briefed that if there is a chance of a safety issue then this should be reported to our control teams who can make the judgement whether it requires immediate action.

The current process in place for community relations is as flows:

All cases are logged in Oracle CRM [Customer Relations Management – computer system]. These cases will remain in an "active" status (e.g. work in progress, planned, assigned etc.) until the work has been completed or response provided to our customer/stakeholder. There are strict corporate targets, of resolving cases within 20 days and there is constant monitoring on cases that exceed this target. For the closure of the reports there are strict guidelines in place that define when a case can be closed, community relations personnel are to utilize the "Oracle Community Relations Service Request Closure Guidance" document.

A guidance pack will be issued to community relations teams providing clarification on what defines a retaining wall and a culvert. This will help the team use the correct codes that fall within each problem type (e.g. structures, earthworks) so the query can be addressed to the correct personnel and closed efficiently.

## Tracking tool for incoming reports

After speaking with a senior structural asset engineer within the LNE route directly Network Rail has gathered some vital correspondence on the trialled tracking tool. The tool has been trialled within LNE on 'structures' & 'earthworks' disciplines. Staff awareness to the trial of the tracking tool was covered at a team brief when it was introduced in LNE.

Route staff highlighted that logging the data in the past was a challenging task, variable sources and formats made it difficult to manage each individual log. The introduction of the tracking tool will address. It will also provide owners to the actions and ensure that requirement for close out in 20 days is tracked. The tracking tool is an interim tool for incoming reports to be adopted by all the routes while the proposed interface system, the 'Community Relations Response Tool' is in development as part of CSAMS [Civil Structures Assessment and Management System].

A formal procedure will be put in place in the form of a guidance document to clearly define when/how to use the tool which will be issued nationally. This along with the Service Request Log spread-sheet & any relating documents will be rolled out with the tool to all the routes by the end of May 2012.

#### Incorporation of the processes and systems into the Building and Civils Transformation Programme

Following discussions with Network Rail's Community Relations team & Route Asset Managers within the LNE route, they have highlighted a requirement for a central database that identifies each inquiry in a standard format. The development of this system would make it accessible to all route & centrally based staff.

Further required fields within the database are to be added to ensure all information from Community Relations & route staff is logged. The revised process will log all incoming queries, this will be done by the Community Relations staff, and Network Rail will develop a notification tool within this database to alert the Route Asset Manager of incoming information. The query could cross be discipline so all appropriate RAMS [Route Asset Managers] are to be notified. A proposed interface system, the 'Community Relations Response Tool' is due to be in development from autumn 2012 to spring 2014, as a module within CSAMS.

28. ORR, in reviewing this response, wrote to Network Rail on 23 May 2012 requesting that it clarifies how:

- a) the 'Community Relations Response Tool' will replace the current processes for recording, prioritising, tracking and closing out cases; and
- b) as a consequence of the shortcomings identified following the Dryclough derailment, the community relation staff in post have also received further training/briefing to ensure adequate processing of cases and that any existing or new maintenance protection co-ordinators have received similar training/briefing.
- 29. Network Rail in its response of 8 June 2012 advised ORR that:
  - a) The roll out of the tracking tool will provide a more consistent and robust process for managing incoming communications. Within the devolved organisation, the benefits of a consistent approach will be made clear; however the separate Routes may choose to adapt the tracking tool to manage the reports.
  - b) The briefing slides have been produced and we are currently working with both Community Relations and Maintenance Protection Co-ordinators to establish the best means of disseminating these to their teams.
- 30. Network Rail provided ORR with copies of:
- National Helpline Emergency Call Process
- National Helpline Call Process
- Quick reference guide 2012
- Oracle Community Relations Service Request Closure Guidance
- The guidance pack providing clarification on what defines a retaining wall and a culvert
- 31. Network Rail in its response of 20 July 2012 advised ORR that:

Network Rail has issued a Service Request Log Tracking Tool (SRLTT) to all Routes to standardise the process for logging and tracking correspondence from community relation teams. Single Points of Contact (SPOC) have been established within the routes to co-ordinate community relations issues.

The Community Relation (CR) teams and MPCs have also been briefed on identification of retaining walls and culverts so that when problems with these assets are reported they are aware that they should be directed to the relevant SPOC within the routes.

Upon receipt of a report from CR, the SPOC within the route will log the call within the SRLTT and assign an Engineer to prioritise the work based upon engineering judgement. Reasons for the priority and timescale to close out will be stated within the SRLTT.

Community Relations aim to resolve issues within 20 days. Where this is not possible the SPOC will provide CR with the planned closure date from the SRLTT this is to be logged by CR against the issue and CR will also add a note confirming permission to apply an exception and why it is being applied.

An item will be logged as closed by the Community Relations when the SPOC reports that the following has been completed:

- Works item has been raised and is being managed through the SRLTT process.
- Site visit completed and confirmed no further action required.

• Review of information and confirmed no further action required.

## **ORR Decision**

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

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

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

#### Status: Implemented

# **Recommendation 5**

The purpose of this recommendation is to check whether there are any other earthworks missing from Network Rail LNE Route's earthworks database, and hence are not being examined.

Network Rail LNE Route should check whether there are any earthworks missing from their examinations database. Any such earthworks found to be missing should be inserted into the database and arrangements made to examine them.

#### Details of steps taken or being taken to implement the recommendation

33. Network Rail in its response of 27 January 2012 advised ORR that:

A survey of all LNE slopes to validate the asset inventory will be undertaken and any missing slopes will be entered onto the Asset Database and examined.

Timescale: 31 July 2012.

34. ORR, in reviewing this response, wrote to Network Rail on 30 October 2012 requesting an update on progress :

35. Network Rail in its response of 1 November 2012 advised ORR that:

Through Network Rail's use of available LiDAR [Light Detection And Ranging] information Network Rail located 4555 potential earthworks 5-chain lengths in LNE and East Midlands which were not already in Network Rail's earthworks database

Network Rail undertook a simple manual check of these sites to eliminate any which were obviously not earthworks. The remainder Network Rail split into a high priority group and a low priority group.

The high priority group of 1628 sites were visited during the 2011/12 examination season, and if appropriate an earthworks examination was undertaken. 50% of the sites visited proved to be earthworks.

The lower priority sites, 1674 no., were visited in the spring/summer of 2012 (in the period before the start of the normal 2012/13 examination season) and where appropriate an examination was undertaken. There will be a few of those sites which were visited but a complete examination could not be undertaken because of

too much vegetation. These will be revisited and examined in the normal 2012/13 examination season (starting in November 2012) with vegetation clearance if necessary. Network Rail has not yet determined what percentage of the low priority sites proved to be earthworks.

The existing LiDAR information only extended to just south of Berwick. 433 no. 5chain lengths in the far north of LNE area which were not covered by available LiDAR information have been added to the 2012/13 examination list. (This excludes some 5-chain lengths which from a manual check were obviously not earthworks.) These "Berwick" sites will be examined between November 2012 and March 2013.

Network Rail is in the process of undertaking a final reconciliation of all the LNE/East Midlands LiDAR sites, to ensure that all the sites have been visited, or have been given specific reasons why they were considered to not contain an earthwork. If Network Rail finds any anomalies then these will be added to the 2012/13 examination task list.

# **ORR Decision**

36. ORR is satisfied that Network Rail has:

- Checked for earthworks missing from the examination database have been carried out and inserted them into the database.
- The majority of examinations for these have now been completed.
- For those not yet examined arrangements have been made for the examinations to be completed by the end of March 2013.

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

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

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

## Status: Implemented