



MetroWest+

Portishead Branch Line (MetroWest Phase 1)

Planning Inspectorate Reference: TR040011

Applicant: North Somerset District Council

9.3.3 ExA.SoCG-EA.D3.V2 – Appendix 6 to Statement of Common Ground

Between

- (1) North Somerset District Council;
- (2) Network Rail Infrastructure Limited; and
- (3) Environment Agency

Version: 2

Date: December 2020



Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Level 3

Work instruction

Track Maintenance Renewal or Alteration - Used Ballast and Excavation Waste Handling

Approvals

Content approved by:



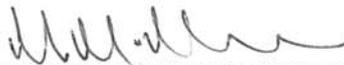
.....
Ian Russell,
Technical Lead

Content approved by:



.....
Lisbeth Fromling,
Standard and Control Document Owner

Approved for publication by:



.....
Mick McManus,
Standards and Controls Management

This document is the property of Network Rail. It shall not be reproduced in whole or part nor disclosed to a third party without the written permission of Network Rail.

© Copyright 2018 Network Rail.

Uncontrolled copy once printed from its electronic source.

Published and Issued by Network Rail, 2nd Floor, One Eversholt Street, London, NW1 2DN.



Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

User information

This Network Rail standard contains colour-coding according to the following Red–Amber–Green classification.

Red requirements – no variations permitted

- Red requirements are to be complied with and achieved at all times.
- Red requirements are presented in a red box.
- Red requirements are monitored for compliance.
- Non-compliances will be investigated and corrective actions enforced.

Amber requirements – variations permitted subject to approved risk analysis and mitigation

- Amber requirements are to be complied with unless an approved variation is in place.
- Amber requirements are presented with an amber sidebar.
- Amber requirements are monitored for compliance.
- Variations can only be approved through the national variations process.
- Non-approved variations will be investigated and corrective actions enforced.

Green guidance – to be used unless alternative solutions are followed

- Guidance should be followed unless an alternative solution produces a better result.
- Guidance is presented with a dotted green sidebar.
- Guidance is not monitored for compliance.
- Alternative solutions should be documented to demonstrate effective control.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Compliance

This Network Rail standard/control document is mandatory and apart from sub-clause 5.1.1 shall be complied with by Network Rail Limited and its contractors if applicable from 1st September 2018. The compliance date for the requirements in sub-clause 5.1.1 is 30th September 2021.

Where it is considered not reasonably practicable¹ to comply with the requirements in this standard/control document, permission to comply with a specified alternative should be sought in accordance with the Network Rail standards and controls process, or with the Railway Group Standards Code if applicable.

If this standard/control document contains requirements that are designed to demonstrate compliance with legislation they shall be complied with irrespective of a project's GRIP stage. In all other circumstances, projects that have formally completed GRIP Stage 3 (Option Selection) may continue to comply with any relevant Network Rail standards/control documents that were current when GRIP Stage 3 was completed.

NOTE 1: Legislation includes Technical Specifications for Interoperability (TSIs).

NOTE 2: The relationship of this standard/control document with legislation and/or external standards is described in the purpose of this standard.

Disclaimer

In issuing this standard/control document for its stated purpose, Network Rail Limited makes no warranties, expressed or implied, that compliance with all or any standards/control documents it issues is sufficient on its own to provide safety or compliance with legislation. Users are reminded of their own duties under legislation.

Compliance with a Network Rail standard/control document does not, of itself, confer immunity from legal obligations.

Where Network Rail Limited has granted permission to copy extracts from Network Rail standards or control documents, Network Rail Limited accepts no responsibility for, nor any liability in connection with, the use of such extracts, or any claims arising there from.

This disclaimer applies to all forms of media in which extracts from Network Rail standards and control documents might be reproduced.

Supply

Copies of standards/control documents are available electronically, within Network Rail's organisation. Hard copies of this document might be available to Network Rail people on request to the relevant controlled publication distributor. Other organisations can obtain copies of this standard/control document from an approved distributor.

¹ This can include gross proportionate project costs with the agreement of the Network Rail Assurance Panel (NRAP).

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Issue record

Issue	Date	Comments
1	August 2003	First issue.
2	April 2004	Company re-organisation
3	September 2011	Revised and updated to simplify the processes involved in 'Used Ballast Handling' for both rail and road removal, and to clarify the roles and responsibilities of the personnel involved.
4	June 2018	Revised and updated legislative requirements; incorporation of handling non acceptable wastes; and simplified the processes for the user.

Reference documentation

<i>NR/L2/CPR/306</i>	<i>Disposal of redundant railway assets</i>
<i>NR/L3/NDS/308</i>	<i>The Loading Manual for Infrastructure Traffic</i>
<i>NR/L2/INI/P3M/101 (formerly NR/L1/INI/PM/GRIP100)</i>	<i>Governance for Railway Investment Projects (GRIP) – Policy</i>
<i>N/A</i>	<i>SCO Internal ACM Emergency Procedure</i>
<i>NR/L3/ENV/044/FO1</i>	<i>Track Ballast Replacement Risk Assessment Form</i>
<i>NR/L2/CIV/168</i>	<i>Asbestos Management</i>
<i>NR/L2/OHS/019</i>	<i>Safety of people at work on or near the line</i>

Legislation

This standard/control document has been reviewed to confirm it complies with the following legislation:

Environmental Protection Act 1990
Control of Pollution (Amendment) Act 1989
Waste (England and Wales) Regulations 2011
Hazardous Waste Regulations 2005
Environmental Permitting Regulations 2016
Waste (Scotland) Regulations 2012
Special Waste Regulations 1996
Special Waste (Scotland) Amendment Regulations 2004
Construction (Design and Management) Regulations 2015
Control of Asbestos Regulations No. 682 2012

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Contents

1 Purpose	6
This work instruction sets out the process to:	6
2 Scope	6
3 Accountable and responsible roles for the end to end waste removal process	7
4 Definitions	10
5 Phase 1 - Pre-works actions	14
6 Phase 2 - Removal of used ballast and track excavation waste (the works)	18
7 Phase 3 - Post work actions	22
Appendix A Lineside sampling protocol for chemical analysis of used ballast	25
Table 1 – Process for removal/reuse of used ballast and other excavated infrastructure waste	9
Table 2 – Process to follow depending on the outcomes of the risk assessment	15
Table 3 – Rail removal option to select when removing used ballast and track excavation waste by rail	18
Table A.4 – Format for sample identifier	26

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

1 Purpose

This work instruction sets out the process to:

- a) correctly identify and handle used ballast and other excavated infrastructure waste when disposing of it from rail worksites; and
- b) comply with the requirements of waste management legislation.

It allows Network Rail to:

- a) guard against pollution;
- b) fulfil statutory requirements;
- c) promote best practice in the way that the waste is handled;
- d) identify hazards that pose risk to the environment;
- e) reduce, reuse and recycle the waste for environmental sustainability benefits;

2 Scope

This work instruction specifies a standard approach to be used in the planning and execution of enhancements, renewals and maintenance work that involve the removal of both hazardous and non-hazardous used railway ballast and other excavated infrastructure waste.

Any differences in requirements between England, Wales and Scotland are clearly stated.

It applies to all parties involved in:

- a) the planning, design and removal of used ballast and rail network excavated infrastructure waste from the track, either by train or road; and
- b) its transport and delivery to the nominated Network Rail Aggregate Handling Depots (AHDs) or an authorised non Network Rail waste management facility.

The work instruction aids:

- a) the identification of hazards in the waste;
- b) waste classification; and
- c) the subsequent appropriate disposal route.

The work instruction helps users to identify presence of non-acceptable waste:

- a) Asbestos Containing Material (ACM) waste;
- b) invasive and injurious plant species; and
- c) other types of non-acceptable waste for AHDs

NOTE 1: Refer to the requirements set out in NR/L2/CIV/168 for work with asbestos. Refer to guidance on Safety Central for removal of invasive and injurious plant species.

It does not:

- a) cover health and safety legislative requirements associated with waste and waste handling;

NOTE 2: Follow a safe work pack for protecting the safety of people at work on or near the line.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

- b) cover infrastructure materials that are not defined as waste through legislative definitions e.g. sleepers, bearers, chairs, rail, and track panels.

These infrastructure materials should be handled using the process set out in NR/L2/CPR/306.

3 Accountable and responsible roles for the end to end waste removal process

Network Rail representative

The nominated role for overall accountability for projects involving excavated infrastructure waste from rail worksites. It is a generic term that covers a range of roles in different Network Rail functions such as Route Businesses and Infrastructure Projects. The role can be delegated to the Contractor. Roles include Project Delivery Manager, Project Manager, Scheme Project Manager, Works Delivery Manager.

Supply Chain Operations (SCO) Materials

Manage the logistics and operations of the network of AHDs that receive used ballast and other excavated infrastructure waste

SCO Environment

Provide technical environment advice and guidance on waste management. Undertake classification of used ballast and other excavated infrastructure waste on behalf of Network Rail.

Issue instructions on the legal requirements for hazardous waste movements. Prepare and issue Hazardous Waste Consignment Notes.

Oversee the renewal of annual waste transfer notes.

SCO Planning

Arrange the provision of rail wagons and the movement of the waste around the rail network.

SCO Regional

Provide the interface between the Network Rail Routes/IP Major Projects/IP Track Renewals and Supply Chain Operations.

SCO 24/7

Provide real time management of SCO rail operations, including the movement of waste and reporting of environmental incidents.

Waste Carrier (Train hauliers)

Freight Operating Companies licenced to carry used ballast and track excavation waste by rail and complete appropriate Duty of Care documentation.

Contractors (including Renewals Contractor, Works Delivery or Maintenance)

Anybody who could remove used ballast and track excavation waste from the Rail Infrastructure.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Completion of appropriate Duty of Care Documentation whilst undertaking projects involving used ballast and track excavation waste on behalf of Network Rail.

Can be delegated authority to act as project manager.

Planning of projects including the identification of waste removal requirements (volume of waste) and the organisation of booking the resources required for track bed investigation and rail/road removal of waste from the worksite.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Follow table 1 to assess which phase you have accountabilities and responsibilities in.

RACI DETAILS	KEY CONTROL ACTIVITY	Resources						SCO Regional	SCO Planning
		Network Rail Representative	SCO Environment	SCO Materials	Waste Carrier	Contractor	SCO 24:7		
Process Task									
Phase 1: Pre-Works Actions (5)									
Risk Assessment (5.1)		A	C						
Chemical Analysis (5.2)		A	R	A					
Non Acceptable Wastes (5.3)		A	C	A			C		
Non Hazardous Ballast (5.4)		A	R	A			C	R	
Hazardous Ballast (5.5)		A	R	A	C	C	C	R	
Phase 2: Removal of Used Ballast and Track Excavation Waste (the works) (6)									
Removal of waste by rail (6.1)		A	C	C	R	R	C	R	
Real time management of waste removal (6.2)		A	C	C	R	R	R	R	
Emergency works (6.3)		A	C	C	R	R	C		
Removal of waste via road (6.4)		A	C	C	R	R			
Phase 3: Post Works Actions (7)									
Waste acceptance process at Network Rail aggregate handling depots (7.1)		C	C	A	C	C	C		
Waste acceptance process at Network Rail hazardous wash plant facility (7.2)		C	C	A	R	C	C		
Waste ballast validation testing (7.3)			C	A					
End of waste (7.4)				A					
Waste Reporting Requirements (7.5)			C	A					
Appendix A Lineside Sampling Protocol for chemical analysis of used ballast		A							
end RACI									

Table 1 – Process for removal/reuse of used ballast and other excavated infrastructure waste

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

4 Definitions

For the purpose of this standard, the following terms and definitions apply.

Term	Definition
Aggregate Handling Depot (AHD)	A Network Rail aggregate recycling centre that is licenced by a regulator to recycle a range of excavated and demolition material from railway enhancements, renewals and maintenance works
Asbestos Risk Management System (ARMS)	Network Rail's asbestos register. It contains information of all known asbestos located within the Railway Infrastructure and premises owned or occupied by Network Rail.
Asbestos	A naturally occurring fibrous silicate material.
Asbestos Containing Material (ACM)	Any material containing one or more of any of the 6 fibrous silicates classified as asbestos (Chrysotile, asbestos grunerite (amosite), crocidolite, asbestos actinolite, asbestos anthophyllite, and asbestos tremolite).
Asbestos fibres	The free fibrous form of this silicate mineral that can be found in track excavation waste, or can be liberated if ACM is broken or disturbed.
Authorised Waste Management Facility	An external facility that is appropriately licenced by a regulator to receive and handle waste from railway enhancements, renewals and maintenance works
Certificate of Readiness (COR)	A document containing the contents of rail wagons signed by a person responsible for the loading of engineering trains.
Consignor	The waste producer. In Network Rail this is either Infrastructure Projects or Route Businesses. Principal contractors are not waste producers; they manage waste on Network Rail's behalf.
Consignee	Permitted waste facility that accepts the waste for disposal, e.g. AHD, Landfill
Determinand	Chemical substances tested for within a chemical analysis test
Emergency works	Where immediate work is necessary to assure the safe performance of the railway. For example, where landslips block the railway and require the immediate removal of ballast.
End of Waste Case	The process that is followed for when waste is recycled in to a quality product and no longer subject to waste legislation. The process stating the End of Waste Case is legally binding and regulated by the Environment Agency for England and Wales.
Environmental Management System (EMS)	A system of formalised processes and procedures for managing environmental risk and opportunity.
Environmental Permit	A permit that allows a range of waste management activities to be undertaken depending upon the type of activity and permit granted. Applies to England and Wales and is regulated by the Environment Agency and Natural Resources Wales

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

	respectively.
Excavated infrastructure waste	A range of composite material that can be removed from track enhancement, renewal and maintenance works, including but not limited to: ballast, concrete, soil, stones, sand, bricks and rubble, ash and clay. It does not include : ACM, general 'black bag' waste, vegetation (including invasive or injurious plant species), catch-pits and plastic drainage piping, geotextiles, concrete cable troughing containing ACM, plastic composite cable troughing, redundant assets
General 'black bag' waste	Waste created to support the activity of track excavation e.g. empty containers; rags
Governance for Railway Investment Projects (GRIP)	A project management process used for call capital expenditure works within Network Rail.
Hazard Directory	A Network Rail repository containing information on known hazards present on the rail infrastructure.
Hazardous waste	Waste that has been determined by sampling and analysis to contain sufficient levels of pollutants to classify it as hazardous waste. Covered in The Hazardous Waste Regulations (England and Wales 2005). See 'Special Waste' for hazardous waste produced in Scotland.
Hazardous Waste Consignment Note	Documentation required under the Duty of Care when hazardous waste is passed from one party to another.
Hazardous Waste Tracker	Document that records the movement of hazardous track waste on the railway infrastructure.
Invasive or injurious plant species	Plant species that are either non-native plants or native harmful weeds. These plants are persistent, intrusive, pose a threat to human or animal health, and have a negative impact on the balance of local biodiversity. For example: Japanese Knotweed, Giant Hogweed, Himalayan Balsam, Rhododendron ponticum, common ragwort, spear thistle, broad-leaved dock, curled dock, creeping or field thistle
Licensed Asbestos Removal Contractor. (LARC)	A party that is licenced to remove asbestos.
Lineside sampling	The physical removal of samples of ballast to test against a range of possible contaminants.
Network Rail representative	Range of roles with responsibility for managing the track waste removal project.
Network Rail Online Logistics (NROL3)	Network Rail system for ordering goods and services from Route Services
Non-Acceptable Waste	Waste that cannot be legally accepted in to an AHD and requires management and disposal to an authorised Waste Management Facility and/or alternative way of managing the waste
Non-Hazardous waste	Waste that has been determined by risk assessment and/or sampling to be suitable for recycling at a AHD or other

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

	licensed facility
Redundant Assets	A material or products removed from the rail infrastructure, which includes: rail, switches and crossings, concrete and timber sleepers (and cast and base plates), cables, trains, on track machines or road vehicles, station structures or architectural salvage, signs, cranes, re-locatable buildings, signal boxes and their equipment, signalling or telecoms equipment, artefacts or records designated by the Railway Heritage Designation Advisory Board (RHDAB)
Reuse	When excavated material is used on site as a substitute for a material that would otherwise be imported to site
Special Waste	The legal term in Scotland for hazardous waste
Spoil	a wide-ranging term used to describe waste material from excavation and can and will include waste materials identified as ' <i>excavated infrastructure waste</i> '
Total Operations Processing System (TOPS)	Network Rail system used to manage and track the movement of trains
Track ballast replacement – Risk Assessment form	Form undertaken ahead of track renewal or maintenance works that assesses the risk of contamination being contained in the waste to be excavated.
Un-categorised waste ballast	Used ballast that has been removed from a worksite without sampling and chemical analysis due to emergency work. To be treated as hazardous until proven otherwise.
Waste Acceptance Criteria (WAC)	The criteria used to determine if waste can be accepted at landfills. A WAC test cannot be used to classify waste. WAC tests determine how waste will behave once disposed of.
Waste carrier	Haulier (road or rail) that carries the waste to an AHD or authorised waste management facility. Must be registered with the environmental regulator.
Waste classification	A legal requirement to classify the type of waste produced into one of two categories: Hazardous or Non-Hazardous based on a strict set of rules looking at the individual and combined levels of chemical elements in the waste and their potential to cause harm to the environment and human health.
Waste exemption	Waste management activity that can be undertaken without the requirement for an environmental permit or waste management licence.
Waste hierarchy	A legal requirement for the waste producer to manage waste in the most environmentally responsible way in the following order of preference: prevention, preparing for reuse, recycling, other recovery (e.g energy recovery), disposal. For Network Rail the waste hierarchy is applied as: Reduce (the amount of ballast waste generated); Reuse (on site); Recycle (waste at AHDs); Recover (not an option for used ballast); Disposal (to landfill. This is a last resort option once all other options have been explored).
Waste Duty of Care	Statutory obligations placed on all parties involved in the

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

	production, removal, transport, treatment or disposal of waste
Waste Management Licence	A licence that allows a range of waste management activities to be undertaken depending upon the type of activity and licence granted. Applies to Scotland only.
Waste Transfer Note	Documentation required under Duty of Care when non-hazardous waste is passed from one party to another. Can be arranged annually or raised for each waste movement.
Works	Undertaking of track renewal or alteration activities on the infrastructure that generates the used ballast and other excavated waste covered by this standard.
Work site	Location on the infrastructure where the excavation and used ballast waste is generated.
Work site walkover	When the work site is assessed ahead of works for risk of hazardous substances being present in the waste.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

5 Phase 1 - Pre-works actions

5.1 Risk assessments for waste to be removed by rail to a Network Rail Aggregate Handling Depot

NOTE 1: For waste to be removed by road follow 6.4. This includes bagged waste removed from the track by rail for disposal at locations other than an AHD.

5.1.1 Ascertain if the proposed works are liable to disturb ACMs

Prior to any work commencing, the Network Rail Representative shall use the worksite asbestos risk assessment to ascertain if the proposed works are liable to disturb ACMs. If there is no risk assessment available, the Network Rail Representative shall commission one.

NOTE 2: The compliance date for this requirement is 30 September 2021.

NOTE 3: The worksite asbestos risk assessment is required under the Control of Asbestos Regulations 2012.

NOTE 4: The Joint Industry Work Group on Asbestos in Soil and Construction & Demolition Materials has produced guidance titled: Control of Asbestos Regulations 2012, Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials. This guidance is authoritative on managing asbestos in soils and construction and demolition waste and available from CL:AIRE.

NOTE 5: If ACM is identified, refer to the requirements set out in NR/L2/CIV/168 for safe management of the ACM until it is removed.

5.1.2 Undertake risk assessment of the worksite

The Network Rail Representative shall then undertake a wider ranging risk assessment of the worksite.

A Track Bed Engineer can be commissioned to undertake this.

The risk assessment shall be done at the time of initial work planning.

NOTE 1: For project work this is commonly 2 to 3 years ahead of the physical onsite works.

If the risk assessment was undertaken in excess of 18 months from when the work will commence, a second risk assessment shall be done before works commence.

The risk assessment shall:

- a) be carried out using NR/L3/ENV/044/F01; and
- b) determine if ballast is likely to be contaminated with hazardous substances.

The Network Rail Representative shall retain completed risk assessments for three years and send a copy to Supply Chain Operations (SCO) Environment upon completion.

Use table 2 to determine which process to follow depending on the outcome of the risk assessment.

Outcome of risk assessment	Process to follow
Risk of hazardous substances being present - lineside sampling is required	Clause 5.2
Risk of non-acceptable wastes being present	Clause 5.3

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

No risk of hazardous substances being present; or analysis of chemical testing proves the waste is non-hazardous	Clause 5.4
Analysis of chemical testing proves the waste is hazardous	Clause 5.5

Table 2 – Process to follow depending on the outcomes of the risk assessment

5.2 Chemical Analysis

If the risk assessment determines that lineside sampling is required, follow the process in appendix A.

All samples shall be tested by a United Kingdom Accreditation Service (UKAS) accredited laboratory.

As a minimum, test samples against these determinands:

- a) arsenic, chromium III, chromium VI, total chromium, copper, nickel, total lead, zinc;
- b) Total Petroleum Hydrocarbons (TPH); test to TPH CWG;
- c) asbestos – identification and quantification of fibres;
- d) other determinands not listed above that have been identified by risk assessment as potential contaminants e.g. Polycyclic Aromatic Hydrocarbons (PAHs).

NOTE 1: *The determinands listed above are the most commonly found contaminants on the rail infrastructure. If the waste removal is to an external authorised waste management facility they may require a broader range of determinands to be tested for. Undertaking a more intensive laboratory analysis on a broader suite of determinands also provides the waste classifier with more information to undertake a more detailed waste classification which can increase the range of external waste removal options. SCO Environment can provide guidance on selecting an appropriate laboratory and suite of determinands for waste not being handled by Network Rail AHDs.*

The Network Rail Representative should send the chemical analysis report to SCO Environment at least 4 weeks prior to the planned waste movement. SCO Environment should:

- a) undertake a waste classification of the analysis within 10 working days of receipt of the sample; and
- b) provide a waste classification report and summary to the Network Rail Representative.

NOTE 2: *The purpose of the risk assessment process and associated sampling analysis is to identify the environmental risks and associated waste handling controls to limit the potential for environmental harm. This process does not replace the need for:*

- an asbestos risk assessment and associated surveys as required by NR/L2/CIV/168; or
- protecting the safety of people at work on or near the line in a safe work pack.

NOTE 3: *This risk assessment and chemical analysis process is to guide Network Rail in being compliant with the relevant environmental regulatory requirements only; it has not been assessed against or demonstrated to meet the requirements of Health & Safety law.*

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Undertake waste classification in accordance with 'Guidance on the classification and assessment of waste – technical guidance WM3' issued by the Environment Agency and Scottish Environment Protection Agency (SEPA).

If a third party (not SCO Environment) is used to classify the waste, the Network Rail Representative shall send SCO Environment the waste classification undertaken by the third party. SCO Environment shall inform the Network Rail Representative if they believe the classification of the waste is inaccurate. If agreement cannot be reached between SCO Environment and the Network Rail Representative, the SCO Materials representative shall decide if the waste can be accepted into a SCO AHD.

NOTE 4: *The SCO Materials Representative is the technically competent person identified by the environmental permit for the SCO recycling facility planned to take the waste.*

If the stage 1 desk top study, sampling and chemical analysis are all over 18 months old, the Network Rail Representative shall commission the stage 2 desk top study of NR/L3/ENV/044/F01 ahead of works.

NOTE 5: *This is to check there is no risk that hazardous substances are present in the ballast that weren't present when the chemical testing was originally undertaken.*

The Hazardous Waste tracker should be updated with any waste classifications that contain hazardous waste by SCO Environment.

SCO Environment shall instruct the Network Rail Representative and the Contractor on the process for completing hazardous waste consignment notes.

5.3 Non-acceptable wastes

Exclude non-acceptable wastes that have been identified by the risk assessment on NR/L2/ENV/044/F01 from the ballast and track excavation waste.

NOTE 1: *Examples include ACM and/or invasive plant species.*

NOTE 2: *SCO are not licenced to handle ACM or invasive species contaminated waste at Network Rail AHDs. To do so would breach the legally binding conditions of the site's environment permit.*

Any visible or known buried ACM present shall be removed by a licensed asbestos removal contractor prior to the commencement of works to load the track excavation and used ballast waste.

NOTE 3: *Network Rail is not a licenced asbestos removal contractor.*

If ACM was present, the Network Rail Representative shall have the ballast tested by a UKAS accredited laboratory for asbestos fibres.

NOTE 4: *If asbestos fibres are identified to be present in the waste, the Network Rail representative should contact SCO Environment for advice.*

If ACM or invasive species waste are identified during excavation work do not load it into rail wagons.

Disposal of ACM shall be undertaken by a licenced asbestos removal contractor.

NOTE 5: *If ACM cannot be quarantined or moved to a road accessible point for disposal, the site manager should contact SCO24:7 for advice.*

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

5.4 Non-hazardous ballast

Once waste is classified as non-hazardous the Network Rail Representative shall arrange for its removal applying the waste hierarchy.

SCO shall:

- a) manage all waste that is removed by rail; and
- b) arrange the annual waste transfer notes for non-hazardous waste movements from worksites to SCO AHDs.

Network Rail Representative shall use one of these waste removal options:

- a) via rail to a Network Rail AHD;

Network Rail Representative, in conjunction with SCO Regional, shall select the waste code on NROL that most accurately describes the non-hazardous waste.

SCO planning shall arrange and plan rail wagons based on the NROL description.

- b) reuse material on-site either using a waste exemption or if the material is proven to be non-waste and suitable for reuse.

***NOTE:** Guidance on how to reuse waste ballast and the waste acceptance process at SCO AHDs can be found on Safety Central.*

5.5 Hazardous ballast

The waste classification using the results of chemical testing of the ballast will indicate whether the ballast is hazardous.

Once waste is classified as hazardous the Network Rail Representative shall arrange for its removal applying the waste hierarchy.

For hazardous waste movements from worksites to the hazardous waste wash plant, waste shall be moved under a Hazardous Waste Consignment Note.

The Network Rail Representative, in conjunction with SCO Regional, shall select the waste code on NROL that most accurately describes the hazardous waste.

SCO planning shall arrange and plan rail wagons based on the NROL description.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

6 Phase 2 - Removal of used ballast and track excavation waste (the works)

6.1 Removal of waste by rail

6.1.1 How to select the rail removal option

Use table 3 to decide which rail removal option to select when removing used ballast and track excavation waste by rail.

Rail removal option	Process to follow
All waste is non-hazardous	Clause 6.1.2
All waste is hazardous (England and Wales)	Clause 6.1.3
All waste is hazardous (Scotland)	Clause 6.1.4
There is a combination of hazardous waste and non-hazardous waste	Clause 6.1.5
There is asbestos fibres within the waste that requires additional controls and consent before moving	Clause 6.1.6

Table 3 – Rail removal option to select when removing used ballast and track excavation waste by rail

6.1.2 Non-hazardous waste removal

The Contractor shall:

- a) load waste as per the process set out in NR/L3/NDS/308;
- b) complete three copies of the Certificate of Readiness (COR) and:
 - 1) retain one copy;
 - 2) give one copy to the Waste Carrier; and
 - 3) email a copy within 48 hours to SCO 24:7 Loco Hauled Service Controller.

The Waste Carrier shall update the rail wagons on TOPS with the waste option descriptive of the waste type and classification.

6.1.3 Hazardous waste removal (England and Wales)

The Contractor shall:

- a) load waste as per the process set out in NR/L3/NDS/308;
- b) label the wagons with yellow used ballast labels with the consignment note code, site name and date written on each label;

NOTE 1: The information on the labels should be clearly written. One label should be applied to each side of each wagon.

- c) complete three copies of the COR and:
 - 1) retain one copy;
 - 2) give one copy to the Waste Carrier; and

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

- 3) email a copy within 48 hours to SCO 24:7 Loco Hauled Service Controller.
- d) follow SCO Environment instruction on completion of the hazardous waste consignment note (see 5.2).

NOTE 2: Completion of the hazardous waste consignment note includes signing section D. Guidance on the legal requirement for the hazardous waste consignment notes can be found on Safety Central and www.gov.uk

The Waste Carrier shall:

- a) follow SCO Environment instruction on completion of the hazardous waste consignment note.

NOTE 3: Completion of the hazardous waste consignment note includes signing section C. Guidance on the legal requirement for the hazardous waste consignment notes can be found on Safety Central and www.gov.uk

- b) update the rail wagons on TOPS with the waste option descriptive of the waste type and classification.

6.1.4 Hazardous waste removal (Scotland)

The Contractor shall:

- a) load waste as per the process set out in NR/L3/NDS/308;
- b) label the wagons with yellow used ballast labels with the consignment note code, site name and date written on each label;

NOTE 1: The information on the labels should be clearly written. One label should be applied to each side of each wagon.

- c) complete three copies of the COR and:
 - 1) retain one copy;
 - 2) give one copy to the Waste Carrier;
 - 3) email a copy within 48 hours to SCO 24:7 Loco Hauled Service Controller.
- d) complete the special waste consignment note and retain the green copy for three years once section C has been signed by the Waste Carrier;

NOTE 2: Completion of the hazardous waste consignment note includes signing section D.

- e) within 48 hours email a copy to SCO Environment and SCO 24:7 Loco Hauled Service Controller.

The Waste Carrier shall:

- a) sign section C of the special waste consignment note;
- b) transport the yellow, pink and gold copies of the special waste consignment note with the train;
- c) update the rail wagons on TOPS with the waste option descriptive of the waste type and classification.

6.1.5 Combination of non-hazardous and hazardous waste

Where there is a combination of non-hazardous and hazardous waste, the Contractor should segregate where practical to do so the hazardous waste from non-hazardous waste during the renewals works and move the waste in accordance with

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

clauses 6.1.2, 6.1.3 or 6.1.4. If this is not possible all waste will be treated as hazardous in accordance with clauses 6.1.3 or 6.1.4.

NOTE: *It is illegal to mix non-hazardous and hazardous wastes or mix different types of hazardous waste. It is also illegal to mix non-hazardous waste with hazardous waste to dilute the hazardous material to the point where it is no longer categorised as hazardous.*

6.1.6 Waste containing asbestos fibres that requires additional controls and consent before moving

If chemical analysis has identified the presence of asbestos fibres above the level of 0.001%weight by weight, the Network Rail Representative shall contact the SCO environment team for the additional process and consent required to move this waste.

NOTE 1: *This is due to additional health and safety requirements for handling this waste at the hazardous waste wash plant so that airborne fibre levels are reduced as far as reasonably practicable below the control limit of 0.1 asbestos fibres per cubic centimetre.*

The Network Rail Representative, in conjunction with SCO Regional, shall book the appropriate quarantined waste categorisation on NROL and TOPS.

SCO planning shall arrange and plan rail wagons based on the NROL description.

The Contractor shall label the wagons with yellow used ballast labels.

NOTE 2: *The waste movement will be covered under the non-hazardous annual waste transfer notes, therefore no hazardous waste consignment note will be issued for the waste movement. However, this is still defined as work with asbestos.*

6.2 Real time management of waste removal

Manage and track the movement of waste on the rail network through the TOPS system as it moves.

Changes from pre-planned works should be managed by the waste carrier's representatives and SCO 24:7.

SCO 24:7 shall update TOPS with the changes.

If the waste is hazardous, SCO 24:7 shall update the hazardous waste tracker.

SCO Planning shall arrange and plan rail wagons based on the updated TOPS description.

6.3 Emergency works

Carry out a worksite risk assessment using NR/L3/ENV/044/F01. If the risk assessment determines there is no risk of contamination being present, remove the waste as per the requirements for non-hazardous ballast removal in accordance with this work instruction.

If there is a risk of hazardous substances being present, or it is not possible to complete a worksite risk assessment due to the nature of the emergency, treat and move the used ballast as quarantined waste until it can be sampled and tested.

Loading shall be undertaken by staff or contractors as per the requirements of NR/L2/CIV/168 for work with asbestos. The Contractor shall inform SCO 24:7 and SCO Environment that the material is un-categorised waste ballast and select the

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

appropriate quarantined waste categorisation on TOPS. SCO Planning shall arrange and plan rail wagons based on the updated TOPS description.

Quarantine the material in wagons at an AHD until it can be sampled, tested and the results analysed to classify the waste. Dispose of it as either non-hazardous or hazardous.

6.4 Removal of waste via road

The Network Rail Representative may arrange for disposal through SCO or directly with an authorised waste contractor.

The Network Rail Representative shall undertake waste classification of the waste in accordance with 'Guidance on the classification and assessment of waste – technical guidance WM3' issued by the Environment Agency and Scottish Environment Protection Agency (SEPA).

The Network Rail Representative shall apply the waste hierarchy when arranging for the waste removal.

When removing waste by road using an authorised waste contractor, the Network Rail Representative shall:

- a) check that the intended disposal or recovery site (consignee) has:
 - 1) the correct environmental permit (if in England or Wales); or
 - 2) waste management licence (if in Scotland); or
 - 3) a relevant waste exemption.
- b) check that the waste carrier is fully licenced to carry the waste;
- c) check the waste acceptance requirements for the disposal or recovery site and arrange if required chemical testing to demonstrate the level of contamination within the waste.

If the waste removal is being managed by SCO, SCO shall undertake these checks on behalf of the Network Rail Representative. The Network Rail Representative shall arrange chemical testing if required. The Network Rail Representative shall contact SCO Materials at least 14 days prior to the work taking place.

During waste removal the Contractor shall:

- a) complete section A, B and D of the waste transfer note (if the waste is non-hazardous) and retain a copy for two years once the waste carrier has completed section C;
- b) use the nearest Network Rail maintenance depot, or available road vehicle access point as the address of where the waste is produced for the Waste Transfer Note or Hazardous Waste Consignment Note;
- c) if in England, and the waste is hazardous, complete sections A, B and D on three copies of the hazardous waste consignment note and:
 - 1) retain a copy for three years once the waste carrier has completed Section C;
 - 2) pass the other two copies to the waste carrier.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

d) if in Scotland, and the waste is hazardous, complete the special waste consignment note and:

- 1) retain the green copy for three years; and
- 2) pass the yellow, pink and gold copy to the waste carrier.

The Network Rail Representative shall make arrangements to obtain a copy of the completed hazardous/special waste consignment note from the Consignee once the waste has been consigned at their premises. If SCO materials have arranged the disposal they shall undertake this function and forward the copy to the Network Rail Representative.

7 Phase 3 - Post work actions

7.1 Waste acceptance process at Network Rail non-hazardous aggregate handling depots

The SCO Materials AHD operator shall assess if the waste in the rail wagons meets the visual and olfactory (smell) waste acceptance criteria of the AHD.

If it does, offload the material and stockpile it for processing. Record the quantity and type of material on the SCO Materials databank.

If suspected ACM is identified during offloading, stop offloading and notify SCO24:7. Follow the SCO Internal ACM Emergency Procedure.

NOTE 1: *The ACM Emergency Procedure is contained within the SCO Environmental Management System.*

NOTE 2: *Deviation from the procedure may result in Network Rail breaching legislation and putting staff at occupational health risk.*

If the waste acceptance criteria is not met, do not offload. Contact SCO Environment and provide details of:

- a) the rail wagon numbers; and
- b) the non-acceptable waste that has been found.

Quarantine the rail wagons and report the non-acceptable waste as an environmental incident to SCO 24:7.

SCO Environment shall contact:

- a) SCO Planning with the rail wagon number to identify contents and origins of the wagons via TOPS; and
- b) the Network Rail Representative to obtain information on the contents of wagons.

SCO Materials shall arrange disposal to an authorised waste management facility with the Network Rail Representative.

7.2 Waste acceptance process at Network Rail hazardous wash plant facility

The wash plant operator shall:

- a) check rail wagons are labelled with yellow used ballast labels and the numbers match the hazardous or special waste consignment note number;

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

- b) assess if the waste meets the visual and olfactory (smell) waste acceptance criteria of the wash plant;
- c) check that the hazardous waste consignment note has been fully completed by both the waste producer and waste carrier;
- d) if all of the above applies, offload the material on to the hazardous wash pad;
- e) if the waste has arisen in England and Wales, complete section E of the hazardous waste consignment note and:
 - 1) retain one copy;
 - 2) pass back one copy to the waste carrier for them to retain;

NOTE 1: All parties retain a copy for three years.

- 3) email a copy to SCO Environment who shall send to the Network Rail Representative.
- f) if the waste has arisen in Scotland, complete Section E of the special waste consignment note and:
 - 1) retain the pink copy;
 - 2) pass back the gold copy to the waste carrier for them to retain;

NOTE 2: All parties retain a copy for three years.

- 3) return the yellow copy to the local SEPA office from where the waste arose;
- 4) email a copy to SCO Environment who shall send to the Network Rail Representative.

If suspected ACM is identified during offloading, stop offloading and notify SCO24:7. Follow the SCO Internal ACM Emergency Procedure.

NOTE 3: The ACM Emergency Procedure is contained within the SCO Environmental Management System.

NOTE 4: Deviation from the procedure may result in Network Rail breaching legislation and putting staff at occupational health risk.

If the waste fails the waste acceptance criteria, do not offload. Contact SCO Environment and provide details of:

- a) the rail wagon numbers; and
- b) the non-acceptable waste that has been found.

Quarantine the rail wagons and report non-acceptable waste as an environmental incident to SCO 24:7.

SCO Environment shall contact:

- a) SCO Planning with the rail wagon number to identify contents and origins of wagons via TOPS; and
- b) the Network Rail Representative to obtain information on the contents of the wagons.

SCO Materials shall arrange disposal to an authorised waste management facility with the Network Rail Representative.

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

7.3 Waste ballast validation testing

Ballast validation testing of the stockpiles at AHDs shall be arranged by SCO Materials and analysed by SCO Environment.

NOTE: *This is a legal requirement under the AHD's environmental permit.*

Testing shall be done at intervals defined in the Environment permit working plan.

SCO Materials shall isolate any stockpile samples as a hotspot for removal to the hazardous waste wash plant:

- a) identified to be containing hazardous substances above the thresholds for hazardous waste; or
- b) found to be containing fibrous asbestos above the 0.001% w/w threshold.

7.4 End of waste

SCO Materials shall produce recycled products under an End of Waste Case. Undertake sampling and analysis of the products at intervals defined in the Quality Management processes for the production of recycled aggregates at AHDs and the End of Waste Case basis.

NOTE: *At this point the recycled products are no longer subject to waste legislation.*

7.5 Waste reporting requirements

SCO Materials shall record the quantity and type of non-hazardous waste received and accepted at each AHD.

NOTE 1: *This forms part of the annual waste transfer note record of waste moved.*

SCO shall submit quarterly waste returns and hazardous waste consignee returns to the relevant national environment agency.

SCO should submit waste data in to the designated company reporting system.

SCO Materials shall record:

- a) the quantity and type of by-product waste arising from the recycling processes onsite at each AHD and its disposal location;

NOTE 2: *This includes facility type (reuse, recycling, reclamation, and disposal facilities).*

- b) the quantity and type of hazardous waste received and accepted at the SCO hazardous wash plant facility;
- c) the quantity and type of by-product waste arising from the recycling processes onsite at the hazardous waste wash plant, including the filter cake;
- d) the disposal locations of by-product waste arising from the recycling process at the hazardous waste wash plant;
- e) data relating to the operation of and processing activities at the hazardous waste wash plant.

NOTE 3: *This is so it can be submitted annually for reporting required by the Environment Agency as part of the regulation of the bespoke environmental permit held at the facility.*

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

Appendix A

Lineside sampling protocol for chemical analysis of used ballast

A.1 Risk assessment

Contractors who undertake the sampling shall produce a risk assessment and method statement for the work and follow identified controls, including having the correct level of competence determined by the risk assessment. Contractors shall be UKAS accredited.

Wear suitable PPE/RPE for the task, taking in to account potential hazards within the ballast.

A.2 Equipment

Use this equipment to collect used ballast samples for chemical analysis:

- a) chemically-resistant, heavy duty bulk sample bags or containers transparent/white) PVC or Polyethylene (PE);
- b) indelible marker pen;
- c) sealable plastic bag for containing the sample labels;
- d) spray bottle and surfactant
- e) cleaning rags.

A.3 Lineside sampling protocol requirements

Undertake all lineside sampling at 40 m intervals.

Take a minimum of three samples on sites if less than 80 m length.

Undertake sampling at Switches and Crossings (S&C) at a maximum of 40 m intervals spread throughout the S&C footprint.

NOTE 1: *This is to investigate all lines/legs associated with the renewal.*

Include 40m either side of the existing S&C unit.

Obtain a bulk sample from the four-foot.

At each sampling location, collect 4 kg of ballast.

The ballast should be made up of approximately 4 x 1 kg increments from the surface (sleeper top level) to the base of the hole. Each increment for sampling should be regularly spaced from the surface to the full depth of the trial hole e.g. (0 – 125 mm), (125 mm – 250 mm), (250 mm – 375 mm) and (375 mm – 500 mm).

NOTE 2: *Depending on the method of investigation and the testing laboratory the incremental weight of the sample for testing may be less than 4kg.*

The samples shall contain the proportion of any fine materials present in the track bed.

Transfer each sample into a PVC or Polyethylene (PE) bulk sample bag or container.

Record the sample identifier using an indelible marker pen on the bag or container.

To guard against the sample identifier being rubbed off in handling and onward transport to the laboratory, place a slip of paper with the sample identifier clearly

Ref:	NR/L3/ENV/044
Issue:	4
Date:	02 June 2018
Compliance date:	01 September 2018

visible and sealed in a sealable plastic bag inside the bulk bag or plastic container prior to sealing (bags can be tied or taped).

NOTE 3: *This is to guard against the sample identifier being rubbed off in handling and onward transport to the laboratory.*

The sample identifier shall have the format shown in table A.1.

1	ELR	Mileage	Line	Date	Sampler	Company	Sample Reference No	Location
i	ii	iii	iv	v	vi	vii	viii	ix

Table A.4 – Format for sample identifier

Transport the bulk bags or containers to the chosen laboratory within 48 hours of lineside collection where possible.

NOTE 4: *This is fundamental to the laboratory. It assists in tracking the samples through the distribution chain from the work site, to the depot, to the courier, to the laboratory. Guidance on sample preservation and storage can be obtained from the chosen laboratory for each job.*

Following collection of each sample, clean the shovel, fork or scoop using decontamination procedures as necessary. This activity shall be undertaken in secluded areas to prevent exposure to others. Collect and dispose of cleaning rags off site at a suitably licensed facility. Where heavy fuel/diesel contamination of the sampling equipment is apparent, check the contamination has been removed. If a risk of asbestos has been identified in the ballast risk assessment:

- a) wear the correct PPE to clean tools; and
- b) dispose of cleaning materials in double sealed bags to an authorised facility licenced to dispose of this waste.

Standard and control document briefing note

Ref: NR/L3/ENV/044	Issue: 4
Title: Track Maintenance Renewal or Alteration - Used Ballast and Excavation Waste Handling	
Publication date: 02 June 2018	Compliance Date: 01 September 2018
Standard/Control Document Owner: Chief QHSE Officer	
Non-compliance rep (Approver of TRACKER applications): Lisa Constable, Weather Resilience and Climate Adaptation Strategy Manager	
Technical lead/contact for briefings: Ian Russell, SCO Environment Manager	Tel: 07734 648023

Purpose:

This work instruction sets out the process to:

- correctly identify and handle used ballast and other excavated infrastructure waste when disposing of it from rail worksites; and
- comply with the requirements of waste management legislation.

It allows Network Rail to:

- guard against pollution;
- fulfil statutory requirements;
- promote best practice in the way that the waste is handled;
- identify hazards that pose risk to the environment;
- reduce, reuse and recycle the waste for environmental sustainability benefits.

Scope:

This work instruction specifies a standard approach to be used in the planning and execution of enhancements, renewals and maintenance work that involve the removal of both hazardous and non-hazardous used railway ballast and other excavated infrastructure waste.

Any differences in requirements between England, Wales and Scotland are clearly stated.

It applies to all parties involved in:

- the planning, design and removal of used ballast and rail network excavated infrastructure waste from the track, either by train or road; and
- its transport and delivery to the nominated Network Rail Aggregate Handling Depots (AHDs) or an authorised non Network Rail waste management facility.

The work instruction aids:

- the identification of hazards in the waste;
- waste classification; and
- the subsequent appropriate disposal route.

The work instruction helps users to identify presence of non-acceptable waste:

- Asbestos Containing Material (ACM) waste;
- invasive and injurious plant species; and
- other types of non-acceptable waste for AHDs

NOTE 1: Refer to the requirements set out in NR/L2/CIV/168 for work with asbestos. Refer to guidance on Safety Central for removal of invasive and injurious plant species.

It does not:

- cover health and safety legislative requirements associated with waste and waste handling;

NOTE 2: Follow a safe work pack for protecting the safety of people at work on or near the line.

- cover infrastructure materials that are not defined as waste through legislative definitions e.g. sleepers, bearers, chairs, rail, and track panels.

These infrastructure materials should be handled using the process set out in NR/L2/CPR/306.

Overview of change

The standard has been updated to take account of revised and updated legislative requirements and incorporate the process for handling non acceptable wastes.

The scope has been made clearer as to what used railway ballast and excavated infrastructure waste is acceptable to be handled via this Standard, and providing help and instruction in better identifying what waste are not acceptable wastes.

The structure has been changed to make the Standard read clearer from the start to the finish of the process.

Detail of change

<u>Section/clause</u>	<u>Amended/ deleted/ new</u>	<u>Summary of changes</u>
2. Scope	Amended	Scope has been made clearer as to what used railway ballast and excavated infrastructure waste is acceptable to be handled via this Standard, and providing help and instruction in better identifying what waste are not acceptable wastes. This

		includes asbestos waste, which was not referenced in the previous version of the Standard. Also emphasises that the Standard does not provide direction on the health and safety legislative requirements associated with waste and waste handling.
3. Accountable and responsible roles	Amended	Updated to the name of roles that have changed through organisational change since the last Standard was updated. Inclusion of a RACI table.
4. Definitions	Amended	Update to definitions
5. Phase 1 – Pre-works actions	New	Structure changed to make the Standard read clearer from the start to the finish of the process i.e from understanding what is in the waste, to when the waste has been appropriately handled at an Aggregate Handling Depot (AHD). Section specifically has instruction on: <ul style="list-style-type: none"> • risk assessments for waste to be removed by rail • a change to the Ballast Risk Assessment Form (NR/L3/ENV/044/F01) that includes an additional question on identifying asbestos risk in the waste (<i>please note that this clause 5.1.1 has an extended compliance date of 30 September 2021</i>); and the addition of a second stage risk assessment if the original risk assessment is older than 18 months from when the waste is to be removed. • More specific requirements on the determinands required to be tested under chemical testing. • Referencing the updated 'Guidance on the classification and assessment of waste (WM3) published by the Environment Agency and SEPA • How to better identify non-acceptable wastes in the used ballast • Reference to consider using re-using waste on site as a removal option • How to arrange for removal of non-hazardous and hazardous waste by rail to an AHD.
6. Phase 2 – Removal of used ballast and track excavation waste (the works)	New	Provides instruction on: <ul style="list-style-type: none"> • How to select the correct rail removal option • Removal of waste via road • Real time management of waste removal • Emergency works
7. Phase 3 – Post Work Actions	New	Provides instruction on: <ul style="list-style-type: none"> • Waste acceptance process at Network Rail AHDs (both non-hazardous and the hazardous wash plant facility) • Waste ballast validation testing • End of waste – when the waste has been fully recycled in to a quality aggregate product • Waste reporting requirements
Appendix A Lineside sampling protocol for chemical analysis	Amended	Amendments include more specific instruction on keeping those who undertake the sampling safe from potential contaminants within the track.

Reasons for change

- 1 Preventing fines from non-compliance with legislation. Recent changes to sentencing guidelines are now closely linked to company turnover and organisation's available resources to manage environmental risk. This means that a non-compliance for Network Rail could result in a significant fine. Having a known risk of legal non-compliance and not acting upon it would also increase the likely amount of fine further.
- 2 Preventing reputational damage from enforcement action.
- 3 Direct costs for incorrectly managing waste. If ACM is not identified during works and arrives at an AHD then this contaminates a larger quantity of ballast and has to be disposed through the costly route of landfill. Since May 2014, disposal of ACM from AHDs has cost Network Rail in excess of £1m. Dealing with ACM at source would be significantly cheaper.
- 4 Operational delays when the Standard is not followed correctly because it is not clear.

Affected documents:

<i>Reference</i>	<i>Impact</i>
NR/L3/ENV/044 ISSUE 3	Superseded
NR/L3/ENV/044/F01 ISSUE 1	New

Briefing requirements:

Will Briefing Management System be used to deliver the briefing to posts listed below? Yes/No

Technical briefings are given to those who have specific responsibilities within this standard/control document.

Awareness briefings are given to those who might be affected by the content but have no specific responsibilities within the standard/control document.

Details of the briefing arrangements are included in the associated briefing programme.

All posts identified for briefing must be as described in OrgPlus.

Briefing <i>(A-Awareness/ T-Technical)</i>	Post	Function	Responsible for cascade briefing? Y/N
A	Chief Quality, Health, Safety and Environment Officer	Safety, Technical & Engineering	N
A	Director Route Asset Management	Route Businesses	N
A	Head of Safety and Sustainable Development	Infrastructure Projects	N
A	Principal Environment and Social Value Manager	Infrastructure Projects	N
T	Lead Design Engineer (Track Bed)	Infrastructure Projects	Y
T	Senior Design Engineer (Track)	Infrastructure Projects	N
T	Track Bed Engineer	Infrastructure Projects	N
A	Head of Route Safety, Health and Environment	Route Businesses	N
A	Chief Buildings & Civil Engineer	Safety, Technical & Engineering	N
A	Professional Head of Track	Safety, Technical & Engineering	N
A	Chief Medical Officer	Safety, Technical & Engineering	N
T	Environmental Strategy Manager	Safety, Technical & Engineering	Y
T	Environmental Management System Manager (Route Businesses)	Safety, Technical & Engineering	Y
A	Occupational Health & Wellbeing Programme Manager	Safety, Technical & Engineering	N
A	Environment Specialist	Route Businesses	N
T	Principal Contractors	External	Y
T	Rail Hauliers	External	Y
T	Route Asset Manager (Track)	Route Businesses	N
T	Scheme Project Manager	Infrastructure Projects	N
T	Project Manager	Infrastructure Projects	N
T	Environment Manager	Infrastructure Projects	Y
A	Environment Specialist	Infrastructure Projects	N
T	Environmental Management System Manager (IP/NSC)	Safety, Technical & Engineering	Y
T	Environment Specialist (Waste)	Safety, Technical & Engineering	N
T	Senior Asset Engineer (Support) (Track)	Route Businesses	N
T	Asset Engineer (Support) (Track)	Route Businesses	N
A	Route Programme Director (Works Delivery)	Route Businesses	N
A	Workforce Health Safety and Environment Advisor	Route Businesses	N
T	Project Manager (Works Delivery)	Route Businesses	N
A	Director, Operations	Route Services	N
A	Director, Materials & Logistics	Route Services	N
A	Business Manager (Delivery Services)	Route Services	N
A	Senior Operations Manager	Route Services	N
T	Operations Manager	Route Services	Y
T	Loco Hauled Service & Materials Controller	Route Services	N
T	Materials Production Manager	Route Services	N
T	Senior Business Support Manager (Aggregates)	Route Services	Y
T	Regional AHD Manager	Route Services	N
T	Site Manager	Route Services	N
T	Environment Manager	Route Services	Y
T	Environment Specialist	Route Services	N

T	Environment Assistant	Route Services	N
T	Route Logistics Manager	Route Services	N
T	National Planning Manager	Route Services	N
A	Head of Maintenance Delivery	Route Businesses	Y
T	Infrastructure Maintenance Delivery Manager	Route Businesses	Y
T	Infrastructure Maintenance Engineer	Route Businesses	Y
T	Functional Engineers	Route Businesses	Y
T	Section Manager [Discipline]	Route Businesses	Y
T	Supervisors	Route Businesses	N
T	Works Delivery Manager	Route Businesses	N
T	Works Delivery Supervisor	Route Businesses	N

NOTE: Contractors are responsible for arranging and undertaking their own Technical and Awareness Briefings in accordance with their own processes and procedures.