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Level 3

Track maintenance, renewal or alteration – Used ballast handling

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3	September 2011	
2	April 2004	Company re-organisation
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Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 3 December 2011.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the issue of any relevant Network Rail standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

Reference documentation

NR/GN/ENV/004, *Waste Management Manual*.

Waste Management. The Duty of Care. A Code of Practice. Available from <http://www.environment-agency.gov.uk/business/topics/waste/40047.aspx>. ISBN 011753210X (current at June 2011). Defra.

Technical Guidance WM2. *Hazardous Waste, Environment Agency Technical Guidance*. <http://www.environment-agency.gov.uk/business/topics/waste/32200.aspx>. Environment Agency.

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1 Purpose

Disposal of used ballast and other track materials from rail infrastructure worksites requires that the waste is correctly categorised and handled.

The purpose of this standard is to guard against pollution and to fulfil statutory requirements, such as the Duty of Care to the handling, transport and management of waste.

It has been agreed with the Environment Agency (EA) in England and Wales and the Scottish Environmental Protection Agency (SEPA) in Scotland.

2 Scope

This Network Rail standard specifies a standardised approach and uniform requirements to be used in the planning and execution of enhancements, renewals and maintenance work that involves the removal of used railway ballast and infrastructure material.

It applies to all parties involved in the planning, design and removal of used ballast and rail network infrastructure materials from the track, either by train or road, and its transport and delivery to the nominated Local Distribution Centre (LDC) or authorised waste management facility.

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3 Roles and responsibilities

National Delivery Service (NDS)	Undertake annual registration of Train Marshalling Yard premise codes. Undertake annual renewal of annual season ticket waste transfer notes for carriage of non-hazardous waste materials by rail. Administrate and monitor the hazardous waste consignment process. Monitor LDC used ballast stockpiles for contamination.
Network Rail Representative	Undertake worksite risk assessments, visual inspections, ballast sampling, and communication of waste categorisation information to the Track Contractor, National Delivery Service (NDS) and interested parties. These duties may be delegated to a nominated Track Contractor.
NDS Environment Specialist	Provide environmental advice on waste management
Track Contractor	<i>Rail:</i> Notification of worksite and carriage information to NDS and interested parties. Completion of waste transfer notes and hazardous waste consignment notes. Segregation of waste and labelling of rail wagons. <i>Road:</i> Provide a valid Premise Code for the worksite or nearest maintenance depot. Completion of waste transfer note/ hazardous waste consignment notes and associated documentation. Use registered Carriers.
Haulier (Rail or Road)	<i>Rail:</i> Completion of respective parts of hazardous waste consignment notes. Entry of wagons identified has carrying hazardous waste onto the TOPS system. <i>Road:</i> Completion of waste transfer notes/ hazardous waste consignment notes and associated documentation.
All	Maintain records. Comply with Duty of Care requirements.

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4 Definitions

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

Asset Management Control Centre (AMCC)	organisation within NDS for managing and logging incidents
Consignor (Waste Producer)	Network Rail organisation or Contractor that causes the waste to be removed from the worksite at which it is produced
Carrier (EA registered)	Freight Operating Company that carries the waste to a LDC or the Road Haulier that carries the waste to a depot or landfill site. Must be registered
Consignee	permitted waste facility that accepts the waste for disposal, e.g. LDC, Landfill
Duty of Care	Statutory obligations placed on all parties involved in the production, removal, transport, treatment or disposal of waste
Environmental Permit/ Waste Management License	subject to conditions issued and enforced by either the EA or SEPA, which authorise the keeping, treatment or disposal of waste materials
hazardous waste ¹ ballast	used ballast 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)
Local Distribution Centre (LDC)	LDCs receive and handle used ballast for processing and/or onward sale. All LDCs shall hold an appropriate Environmental Permit, Waste Management Licence, PPC Permit or exemption to undertake their activities
Network Rail Representative	Route Asset Manager/Project Manager/Integrated Management Team (IMT) member
non-hazardous waste ballast	used ballast that has been determined by risk assessment and/or sampling to be suitable for reuse/recycling and uncontained storage at an LDC or other licensed facility
Premises Code	code issued by the Environment Agency to all registered premises that produce hazardous waste
Special Waste	hazardous waste in Scotland and is covered in "The Special Waste Amendment (Scotland) Regulations 2004".
Track Contractor	internal/external organisation that undertakes work involving the removal of railway ballast
Waste Transfer Note	documentation required under Duty of Care when waste is passed from one party to another
un-categorised waste ballast	used ballast that has been removed from a worksite without sampling and chemical analysis due to short notice work, unexpected encounters or emergencies. To be treated as hazardous until proven otherwise.

¹ The term is used throughout the text to mean "Special Waste" in Scotland.

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5 Used ballast handling procedure for removal by rail

An overview of the process to be followed is given in Figure 1.

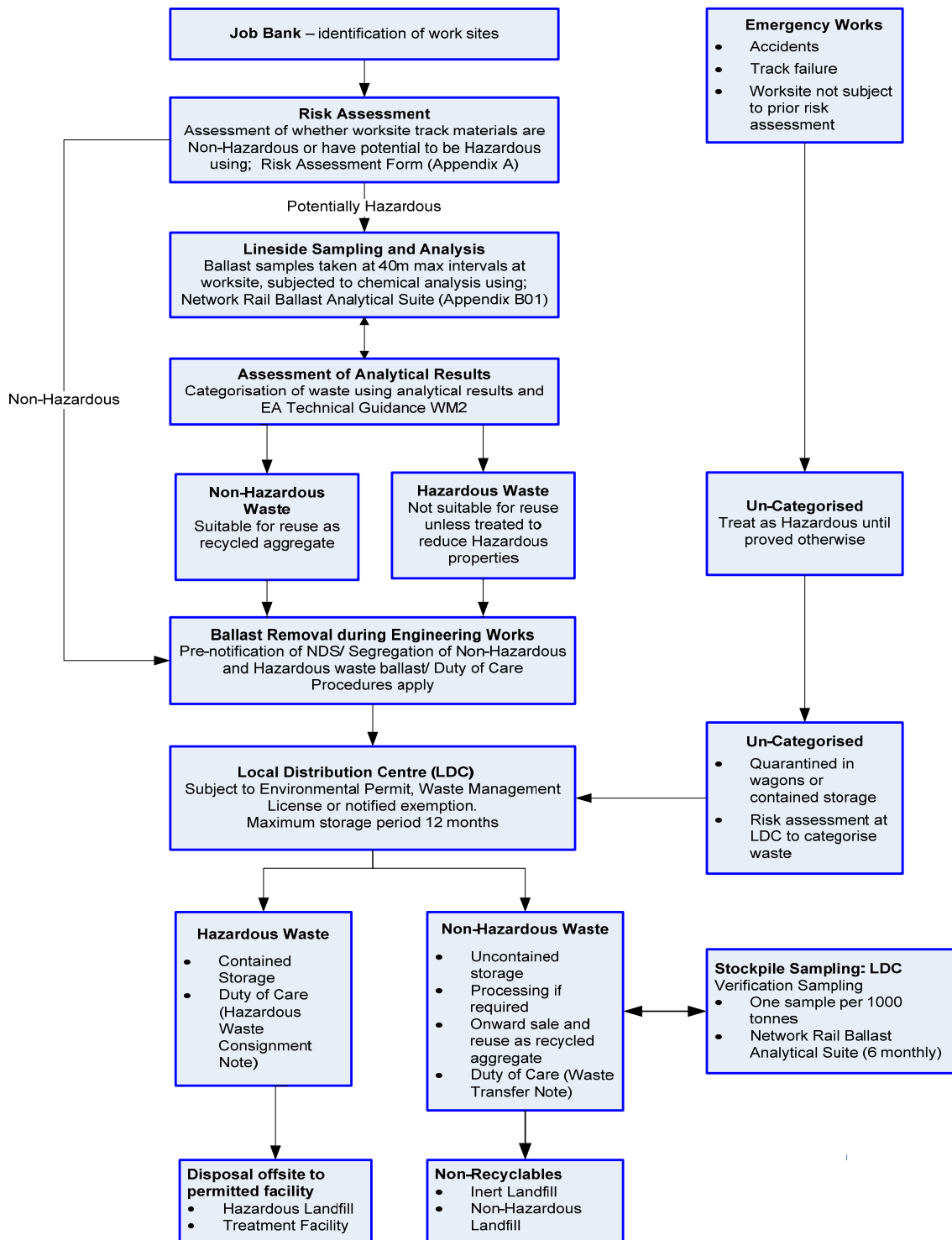


Figure 1 – Track replacement – used ballast handling

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6 Pre-site work activities

6.1 Worksite Risk Assessment

The Network Rail Representative shall be responsible for categorising the track materials (e.g. used ballast) to be removed from each worksite within the scope of work as either “non-hazardous waste” or “hazardous waste”.

Prior to on-site activities, the risk of the worksite being contaminated with hazardous substances shall be assessed using Appendix A, *Track ballast replacement – Risk Assessment form* and its associated tables.

Follow this risk assessment process:

a. Desktop Study (Q1 – Q7)

Gather appropriate information and circle either the “Yes” or “No” arrow for all questions.

Q1 – Q3: For all “Yes” answers, note the location and mileage details and arrange for ballast sampling and testing, as specified in **6.2**.

Q4 – Q7: For all “Yes” answers, note the location and mileage details and undertake a worksite walkover. See (b.).

If answers to Q1 to Q7 are all “No”, no sampling is required. The worksite can be categorised as “non-hazardous waste”.

b. Worksite Walkover (Q8 – Q9)

For each section of track identified in Q4 – Q7, undertake a worksite walkover visually inspecting the ballast for evidence of contamination with hazardous substances and answer Q8 and Q9 by circling either the “Yes” or “No” arrow.

For all “Yes” answers, note the location and mileage details and arrange for ballast sampling and testing (see **6.2**).

For each section, if any answers to Q8 and Q9 are “No”, no sampling within the mileage inspected is required. The waste ballast can be categorised as “non-hazardous waste”

On completion of the risk assessment, enter the Assessor’s name and date undertaken into the boxes provided.

Retain a copy of the risk assessment in the worksite’s Health and Safety File.

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6.2 Line side sampling

6.2.1 General

The Network Rail Representative shall arrange for samples of ballast to be taken from the worksite by a competent Track Contractor, in accordance with Appendix E, *Lineside Sampling Protocol*, to the required depth and frequency.

6.2.2 Plain line

For plain line renewal items, taken samples at 40 m intervals as determined by the worksite risk assessment (**6.1**). For renewals of less than 100 m, take at least three samples (one at each end of the renewal and one in the middle).

6.2.3 Switches & Crossings (S&C)

Undertake sampling at a maximum of 40 m intervals spread throughout the S&C footprint to investigate all lines/legs associated with the renewal either:

- a) as specified in the Network Rail Representative's Core Requirements; or
- b) at least 40 m either side of the units proposed for renewal.

For enhancement/remodelling schemes, extend the sampling to at least 100 m beyond the length of any units proposed for renewal to account for any latter day changes to track design.

6.2.4 Sample submission for analysis

The Network Rail Representative shall arrange for:

- a) the samples to be submitted to an approved laboratory for analysis in accordance to the Network Rail Analytical suite (specified in Appendix B, **B.1**); and
- b) the analytical results for assessment to be obtained.

6.2.5 Sample analytical results and waste categorisation

Assess the laboratory analytical results using the Environment Agency Technical Guidance (WM2). Categorise each section as either "non-hazardous waste" or "hazardous waste".

For sections found to be hazardous waste, record the applicable hazard code H1-H14 (given in WM2) on the analytical results sheet.

For non-hazardous waste, record a capital letter "A" or tick against the sample concerned.

Waste categorisation may be undertaken by the NDS Environment Specialist, analytical laboratories or other party competent in the application of WM2.