

Issue Details	Ref ENV/04 Issue No. 2 Issue Date 01/08/2014
Issue Title	Project Management and the Environment
Issue Status	Revised
Compliance Date	Immediate
Standard Contact	Chris Leek, Head of Q&E or Calvin Robertson, Environmental Advisor

Affected Roles

The following roles have specific responsibilities within this standard and must receive a briefing as part of implementation. This is determined using the 'RACI' principle for roles identified as 'Responsible' and 'Accountable'

An awareness briefing will be circulated to those roles identified as 'Consulted' and 'Informed'

Role	Type of briefing	Business
Senior Project Managers /	Technical	VolkerRail
HSQE Staff	Technical	VolkerRail
Work Winning	Technical	VolkerRail
Project Managers	Technical	VolkerRail
Project Engineers	Technical	VolkerRail

Purpose

This standard details the process by which any environmental issues that are identified or arise on projects undertaken by VolkerRail (VR) are to be managed from the tender stage through to project completion.

Scope

This standard relates to all projects that are undertaken by VR that may have the potential for any positive/negative environmental effects. A number of templates and forms are provided to assist Project Managers in the identification and management of environmental issues, which are referred to in this standard and other associated VR Standards.

It is essential that Project Managers liaise with the VR HSQE department throughout all stages of the project to ensure they adequately control environmental risks.

Summary of Changes

This standard requires the Project Manager/team to ensure a number of environmental requirements are reviewed and implemented, where required, from tendering stage through to hand back on all VolkerRail projects. These requirements include, but not limited to, the following:

- Production of specific Project Environmental Checklist & Report forms – ENV04/F/01
- Production of specific Project Site Environmental Survey Form (SESF) – ENV04/F/02
- All legislative or statutory restraints on the project,
- Any permissions and consents that will be required to implement the project and who will be responsible for seeking them,
- Authorities or bodies who need to be consulted and the programme for doing so, and

- All external communications made with external organisations, for example, Natural England (for SSSI's), Local Authorities (for noise issues) or the Environment Agency (for work adjacent to water, waste etc.) or other external bodies must be retained by the Project Manager.




The changes in this version of the standard include:

- Standard updated to reflect necessary updates to the Environmental Survey Process in line with current business practice and legislative requirements.
- Addition of Appendix A to include information on the process of identification of Environmental Requirements.
- Updated template for the PECR.
- Addition of Site Environmental Survey form in order to assist with identification of site environmental issues.
- Reference to the Network Rail standard for Environmental Performance Indicators added to ensure required performance data is collated as required by contract requirements.
- Reference to the London Underground QUENSH requirements added to the document due to the business tendering for work on the London Underground infrastructure.

Compliance with the requirements of this standard is **mandatory** for all VR business units and is necessary to ensure the company is able to demonstrate its commitment to effective environmental management in all its activities and required to meet the requirements of BS EN ISO 14001 – Environmental Management Systems international standard.



Project Management and the Environment

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Accepted for issue	 _____ Emma Glenc, Assurance Manager

Document Control

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Issue Details

This document will be updated when necessary by distribution of a complete replacement.

Amended or additional pages will be marked by a vertical black line in the adjacent margin.

Issue No.	Date	Details of Change
1	09/11/2012	<p>Formerly issued as SQE/73 which has been withdrawn upon this issue. Initial issue as ENV/04. Changes have been made to reflect current company structure and processes. The main changes have been made to ensure that the Project Managers are aware of their Environmental Responsibilities, along with a clear process of what needs to be done to identify, communicate and manage these environmental issues.</p> <p>Appendix B has been removed from this document as it is no longer applicable.</p>
2	01/08/2014	<p>Updated to reflect necessary updates to the Environmental Survey Process in line with current business practice and legislative requirements.</p> <p>Addition of Appendix A to include information on the process of identification of Environmental Requirements.</p> <p>Updated template for the PECR.</p> <p>Addition of Site Environmental Survey form in order to assist with identification of site environmental issues.</p>

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Appendices

- A Process for the Identification of Environmental Issues

Associated Forms

- ENV/04/F01 Project Environmental Checklist and Report (PECR)
- ENV/04/F02 Site Environmental Survey Form (SESF)

1. Purpose

This standard details the process by which any environmental issues that are identified or arise on projects undertaken by VolkerRail (VR) are to be managed from the tender stage through to project completion.

2. Scope

This standard relates to all projects that are undertaken by VR that may have the potential for any positive/negative environmental effects. A number of templates and forms are provided to assist **Project Managers** in the identification and management of environmental issues, which are referred to in this standard and other associated VR Standards.

It is essential that **Project Managers** liaise with the VR HSQE department throughout all stages of the project to ensure they adequately control environmental risks.

3. Compliance

Compliance with the requirements of this standard is **mandatory** for all VR business units and is necessary to ensure the company is able to demonstrate its commitment to effective environmental management in all its activities and required to meet the requirements of BS EN ISO 14001 – Environmental Management Systems international standard.

The compliance date of this standard is with immediate effect from the date of issue.

4. Definitions & Abbreviations

Environment	Those issues that interface with the company and the surrounding in which it operates, including, air, water, land, natural resources, flora, fauna, humans and their interrelation.
Environmental Aspect	An element of the company's activities, products or services that can interact with the environment.
Environmental Impact	Any change to the environment, whether adverse or beneficial, wholly or partly resulting from the company's activities products or services.
HoQE	Head of Quality & Environment
IMS	Integrated Management System
PECR	Project Environmental Checklist and Report. A form used to identify the key environmental issues for the project, along with their associated severity. This is also used to assist in the development of the PEMP. Attached as Form ENV/04/FO1 to this standard.
PEMP	Project Environmental Management Plan - A document produced following award of contract that ensure environmental issues and risks arising from specific projects are managed by systematically identifying, addressing, monitoring, regularly reviewing and updating.
PQQ	Pre-Qualification Questions
Prevention of Pollution	Use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

SESF	Site Environmental Survey Form. A form used to assist staff on site when completing an initial site visit in order to ensure that relevant environmental issues are covered to be added into the PECR for the project. Attached as Form ENV/04/FO2 to this standard.
SPEI	Specific Plant Environmental Information. This document includes information on the types/volumes of oil(s), coolants and other relevant information of OTMs, RMCs and Small Plant owned by VR Plant. It can be used in project planning in order to ensure contingencies are implemented for potential breakdowns and spillages that may occur on site and is available on the intranet.
SWMP	Site Waste Management Plan.
VR	VolkerRail

5. References

ISO14001 – International Standard Environmental Management Systems

NR/SP/ENV/015 – Network Rail Contract Requirements – Environment

NR/L3/INI/CP0050 – Environmental Performance Indicators

London Underground Contract QUENSH Conditions – Clause 52.

IMS Element 34 – Environmental Management

VolkerRail Project Management Standards.

- ENV/01 - VolkerRail Environmental Policies and Arrangements
- ENV/02 - Identification of Environmental Aspects and Impacts (formerly SQE/71)
- ENV/05 - Waste Management
- ENV/06 - Control of Statutory Nuisances (formerly SQE/75, SQE/76, SQE/77)
- ENV/07 - Pollution Prevention
- ENV/08 - Management of Environmental Incidents
- ENV/09 - Management of Protected Sites and Species

6. Management Arrangements

6.1. Tender Stage

The environmental specifications for the project must be planned in order to demonstrate that the necessary requirements for the project are met together with the corporate requirements of the VolkerRail Environmental Policies and Arrangements (ENV/01) and the Integrated Management System (IMS).

The flowchart included in Appendix A identifies the process for identification of environmental issues from tender stage through to contract award.

It is essential that the **Bid Manager/Project Manager** makes contact with the **Head of Quality & Environment (HoQE)** at the earliest possible point of the tender process to ensure full support can be provided to the bid team.

The appropriate **Bid Manager/Project Manager** shall ensure that the relevant environmental issues are identified at the Pre-Qualification Question (PQQ) / Tender stage so that any specific requirements can be included in the submitted tender. These may include for example, the costs for noise screens, sound-reduced plant, additional spill kits and bunds for the safe storage of hazardous materials, as well as more site specific requirements such as the need for ecological surveys, permissions & consents, drain clearance/surveys and/or vegetation clearance. By identifying these issues at the earliest stage possible, the HoQE can propose possible solutions and methods VR can adopt on the project to minimise damage and costs.

In most cases the client will request the submission of a Tender/Outline Environmental Management Plan as part of the tender deliverables. The **Bid Manager/Project Manager** will utilise the Project Environmental Management Plan (PEMP) Tender Phase template for this purpose. The tender phase PEMP will provide an overview of the company's environmental management system (EMS) and how this will be applied to that particular contract. The tender phase PEMP template is available on the VR Intranet or from the HoQE.

The tender phase PEMP **MUST** be reviewed by the **Head of Quality & Environment / Environmental Advisor** prior to inclusion in the tender pack.

Where required by the tender documentation project/contract specific environmental aspects & impacts shall be identified at tender stage by the appropriate **Project Manager** and/or HSQE Manager/Advisor/Environmental Advisor. These shall be based on the information provided in the tender documentation, obtained from any site visit along with the completion of a Site Environmental Survey Form - SESF (ENV/04/F02).

If timescales allow the completion of a Project Environmental Checklist & Report (PECR) can be produced identifying relevant environmental aspects and impacts. Further guidance on the methodology used in evaluating significant aspects and impacts can be found in VR Standard ENV/02 – Identification of Environmental Aspects and Impacts.

The level of environmental support shall be discussed with the Bid Manager and the HoQE at tender stage to ensure adequate resources are planned and included within the tender submission. This support must be in line with client requirements where stated.

6.2. Design Management

In most instances the design aspects of VR's work are sub-contracted. However, VR currently maintains a Permanent Way Design standard which documents the various aspects of the design management process and includes details on how the design management process incorporates any necessary environmental considerations. This standard is used for all design activities when they are conducted.

During the planning stages of work photographs may be attached as an appendix to the PECR – ENV/04/F01 and if completed the SESF – ENV/04/F02 in order to demonstrate potential environmental problems, for example, contaminated land and sensitive buildings. The **Project Manager** should be aware of any potential environmental issues in order that these can be considered should they affect the work.

6.3. Contract Award Stage

Upon award of contract the **Project Manager** and/or **HSQE Manager/Advisor/Environmental Advisor** shall ensure a PECR- ENV/04/F01 is completed which will confirm the environmental issues identified at the tender stage to ensure it fully meets the requirements of the project/contract. If it is possible to complete a site visit then the SESF - ENV/04/F02 - should be used to ensure environmental issues are identified during the site visit and fed back into the PECR.

At the earliest appropriate stage, the **Project Manager** and/or **HSQE Manager / Advisor / Environmental Advisor** shall identify, as part of the PECR:

- All legislative or statutory restraints on the project,
- Any permissions and consents that will be required to implement the project and who will be responsible for seeking them,
- Authorities or bodies who need to be consulted and the programme for doing so, and
- All external communications made with external organisations, for example, Natural England (for SSSI's), Local Authorities (for noise issues) or the Environment Agency (for work adjacent to water, waste etc.) or other external bodies must be retained by the **Project Manager**.

The **Project Manager** is ultimately responsible for ensuring effective management of any project environmental issues. However support and guidance should be sought from the **HSQE Managers/Advisors/Environmental Advisor** and the **HoQE**.

The **Project Manager** is responsible for making contact with VR Plant and/or subcontractor(s) prior to the completion of the PECR in order to ascertain the type and number of plant required for the project. This gives the Project Manager the opportunity to specify, for example, if and when silent plant is required for works in a residential area. By using the Specific Plant Environmental Information (SPEI) available on the intranet VR Plant and the project management teams can work together to minimise the environmental hazards prior to the work on site commencing.

Following the award of contract and the completion of the PECR as detailed above, the Project Manager shall ensure that the tender stage PEMP is reviewed and amended accordingly generating a construction phase PEMP. For contracts with Network Rail it is a requirement that the construction phase PEMP is issued for acceptance within 28days of contract award. This timescale may differ with various clients and should be clarified within the contract documentation by the **Project Manager**.

The **Project Manager** must ensure that the construction phase PEMP is reviewed and authorised by the **HSQE Manager/Advisor** and the **Head of Quality & Environment** prior to submission to the client. The construction phase PEMP is a working document and regular reviews should be undertaken throughout the contract period, depending on the duration of the contract, however the periods between reviews should not exceed 6-monthly.

6.4. Waste Management

In order to help to achieve VR's environmental objectives and targets work must be managed in a manner that seeks to minimise waste as far as reasonably practicable, particularly material sent to landfill sites.

For contracts where VR are nominated as Principal Contractor the **Project Manager** must ensure that a Site Waste Management Plan (SWMP) is developed and implemented prior to the commencement of work, unless deemed not applicable. The **Project Manager** shall liaise with the client in the development of the SWMP as it may be that a SWMP has already been produced at the design stage by the client.

The SWMP will include information on how the waste will be managed throughout the duration of the contract and will include, but not limited to, the following:

- Type(s) of waste
- The number of skips to be provided
- Opportunities to apply the Waste Hierarchy
- Licensing requirements for handling and disposal
- Special precautions necessary
- Management of waste transfer documentation and,

-
- Arrangements for disposal, transport, tip, sub- contractor.

The **Project Manager** will nominate a site '**Waste Champion**' who will be responsible for the management of the waste arrangements throughout the contract duration.

The **HSQE Manager / Advisor / Environmental Advisor** shall ensure the nominated 'Waste Champion' has received internal 'Duty of Care' training/briefing prior to undertaken the role.

Further details on the management of waste can be found in VR Standard ENV/05 – Waste Management.

6.5. Pollution and Nuisance Control

Potentially polluting materials are managed at depots and on sites to ensure that any potential risks to the environment are minimised, for example, fuels, oils, paints and chemicals. Pollution control procedures are in place to help Project Managers to manage the potential risks from the storage and handling of hazardous materials.

The relevant VR Standard can be found on the VR intranet – ENV/07 Pollution Prevention, as well as further guidance and toolbox talks.

VR Plant use Panolin bio-degradable oil on all heavy plant and spill kits are available on machines to respond to minor incidents. The Project Manager must ensure that 'drip trays' and funnels are available and used on sites to minimise the risk and contain any spillages that occur during refuelling.

The **Project Manager** must ensure that any permissions and consents are in place prior to the commencement of the works. This includes the application for a Section 61 Consent from the relevant Local Authority(s). The process for applying for Section 61 consent is detailed in VR Standard ENV/06 – Best Practicable Means: Control of Statutory Nuisances.

VR Standard ENV/06 is also in place to help to minimise the risk of noise pollution to sensitive receptors in close proximity to the site. Measures to reduce noise levels arising from plant must be applied during work, for example, careful siting of plant away from buildings where practicable and the use of sound-reduced plant noise/acoustic screens where appropriate. Guidance on the control of other nuisances arising from VR's operations, for example, dust and lights is also available in ENV/06.

6.6. Protected Sites and Species

Where necessary and identified on the PECR, the **Project Manager** must commission an ecological survey to identify the locations of any protected species and their habitats. As far in advance of the work as possible the **Project Manager** must ensure that any protected sites and/or species of flora and fauna in the vicinity of the site are identified prior to work commencing and that all project staff receive a briefing outlining the location of any protected areas. The brief must include any measures to be implemented to prevent disruption to these areas and details of the emergency procedure to be followed in the event of an incident involving a protected site/species.

Advice on the location of protected areas can be obtained from Natural England, the relevant Network Rail HSQE representative, the Network Rail regional Biodiversity Action Plan (BAP), London Underground or **VR HoQE / HSQE Manager / HSQE Advisors / Environmental Advisors**. When in doubt advice must always be sought in advance of work commencing.

Although it may be possible to conduct a site survey before works commence, due to reasons such as access, time of year etc. it may not be possible to identify all environmental issues. Therefore included in the SESF a map of the area surveyed will be included. Staff on site should be aware that there is always the potential to come across unidentified issues such as **Japanese Knotweed or Badger Setts therefore they must ensure that they stop work immediately if they believe they have come across any protected sites or species etc.**

If any vegetation clearance works are going to be taking place within the bird nesting season a bird nesting survey must be completed before works commence. VR Standard ENV/09 – Management of Protected Sites and Species, details the process for this subject.

6.7. Duration of the Project

If during the course of a project any person identifies a potential environmental issue, they shall consult the **Project Manager** who must assess the validity of the issue. If necessary, the Project Manager can seek the advice of the **HoQE/HSQE Manager/HSQE Advisor/Environmental Advisor**. The PECR and PEMP may need to be reviewed under such circumstances to incorporate any new issues.

The PECR must be reviewed by the Project Manager in the event of any significant changes that are made to the project, which may include but not be limited to the following: -

- Environmental legislation alterations/additions,
- Changes in the work location and/or scope,
- Discovery of protected areas/species and/or archaeological remains or
- Changes in client requirements

During the production of the PECR, high risk environmental activities will be identified. The **Project Manager** must ensure that controls / mitigation measures are put in place to reduce the risk rating. Advice on appropriate controls can be sought from the **HSQE/Environmental Advisors** and the **HoQE**.

If there has been a high risk environmental activity identified, the **Project Manager** must liaise with the **HoQE** to determine if it is necessary to have an environmental representative or possibly an Ecologist on-site during works (for example during vegetation clearance in the bird nesting season). If there is not an environmental representative available there must be a VR representative on site.

When a **Project Manager** determines that a significant new environmental issue has been identified, the appropriate **HSQE Manager/HSQE Advisor/Environmental Advisor** or the **HoQE** must be informed to ensure that appropriate action is taken and determine the likely effects on the VR EMS.

The Project Manager must ensure that where required by contract requirements, environmental data is provided to the client. For example Network Rail standard NR/L3/INI/CP0050 requires the following to be monitored and reported:

- Environmental Incidents
- Materials and Waste Management
- Co2 Consumption
- Water Consumption

6.8. Emergency Procedures

An emergency environmental procedure has been developed, ENV/08 – Management of Environmental Incidents, and must be referenced in work package plans/method statements, PEMP's and site instructions. This procedure details the response and actions to be taken in the event of an incident, the services that can be called upon for help and the relevant authorities to be contacted.

6.9. Communication

It is the responsibility of the **Project Manager** to ensure that all project staff and sub-contractors are briefed on the main issues identified in the PECR/PEMP to ensure they understand the specific requirements of the site activities, its location and environmental aspects. For example, possible environmental impacts on neighbours, water courses and protected sites/species.

The **Project Manager** must ensure that when key environmental risks have been identified in the PECR and PEMP, they are then included in the WPP's and the Task Briefs produced for the works. This documentation should then be reviewed by the relevant **HSQE Manager/Advisor/Environmental Advisor** or **HoQE** in order to ensure that all issues have been considered, communicated and managed effectively.

Environmental tool box talks should also be delivered on the project; the **Project Manager** shall ensure these are effectively delivered. The frequency and content of these tool box talks will be determined by the **HSQE Advisor/Environmental Advisor** depending on the key risks associated with the project. Records of all site briefings delivered must be retained by the **Project Manager**.

If it is identified that there is going to be significant risks in a certain area for the project the **Project Manager** should communicate with the **HSQE Manager/Advisor/Environmental Advisor** who will be able to deliver further specific training depending on their requirements, for example specific briefing to staff on identification and treatment of invasive species.

6.10. Monitoring and Measurement

The **Project Manager** and **HSQE Manager/HSQE Advisor/Environmental Advisor** must ensure that regular inspections are carried out in accordance with documented standards to establish the effects on the identified environmental aspects to ensure that the objectives of the PEMP are being achieved and to measure its overall effectiveness. These inspections are also used to establish compliance with the regulations, environmental legislation and client requirements that may be applicable to the project.

These inspections will be supported by internal audits managed by the **HoQE** and as detailed in the VR standards.

The **Project Manager** shall provide full and free access to the client's representatives, certification body or environmental regulatory body for the purpose of carrying out scheduled or random audits/surveillance of the environmental management system to ensure continued conformance with the requirements of the contract and/or management system.

VR shall ensure that all sub-contractors are made aware of the environmental requirements of the contract as they apply to them.

The environmental performance of some sub-contractors should be assessed to ensure that they are complying with the environmental management system and associated procedures. The **Project Manager** will ensure that where any of the responsibility for the environment is devolved onto another party, the performance of that party is regularly assessed and that appropriate corrective action is taken in the event of non-conformance being detected.

6.11. Complaints

Complaints received by either the **Project Manager, VolkerRail Control Centre (VRCC)** or directly to VR Head Office are subject to a complaints procedure, which identifies when corrective action is required to rectify problems and ensure that where possible systems are modified to prevent recurrence. All complaints must be reported to **VRCC** to enable the **Project Manager** and/or **HoQE** to take action as necessary. All complaints are monitored by the **HoQE** and the actions taken to resolve the complaint(s) are recorded.

7. Monitoring**7.1. Proactive**

The HoQE will ensure the performance against the criteria detailed in this standard is monitored on a regular basis.

VR recognise that the activities associated with this standard are high risk in terms of compliance to ISO approvals and safety critical measurements, therefore the arrangements will be included in the internal audit plan by the HoQE.

7.2. Reactive

The process will be subject to external audits to ensure continued compliance with the requirements of ISO14001 and client requirements where appropriate.

8. Retention of Records

No specific records are generated through the implementation of this VR standard. Records referenced throughout the EMS are detailed in each individual group standard.

Records pertaining to the management of the PEMP and associated systems must be maintained either in paper or electronic format or both by the **Project Manager**. Records are detailed in the relevant internal standards referenced throughout this standard, which provides details of those items to be retained for a particular project and by whom. The **Project Manager** is responsible for maintaining a filing system of all relevant environmental records.

