Construction Environmental Management Plan

TRAWS-L28302-DOC-0232 Issue 01

Nuclear Restoration Services Trawsfynydd

North Laydown Area Improvements (Phase 2)

Verification

This document has been verified and is fit for purpose for the phase that the project is currently in.

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Table of Contents

1 Introduction

Nuclear Restoration Services (NRS) Ltd are proposing to extend the existing laydown area in the North End of the site, using crushed demolition arisings generated as part of the planned reactor buildings height reduction works.

A planning application will be submitted in relation to the laydown area extension works. The recovery of demolition wastes as an engineered fill material shall be governed by a Deposit for Recovery (DfR) environmental permit.

The extents of the proposed laydown extension works are indicated on the design drawings TRA/3210/LA/49376 and TRA/3210/LA/49377.

This document sets out the intended methods of effectively managing potential environmental impacts arising from the proposed works required for the North Laydown Area Improvements. This CEMP reflects the requirements of NRS Standard Procedure S-481, including a requirement to ensure that enough Competent Persons with Environmental Supervisor knowledge are assigned to the works. In addition, on-site works will be managed in accordance with company procedure S-722, Safe Management of Contractors. This ensures that the contractor make sufficient provision to mitigate all risk to the environment whilst undertaking their work.

2 Contacts and Responsibilities

This section describes the key contacts and overarching responsibilities of members of the project team associated with environmental protection. Appendix A provides an overview of the roles that will be appointed during the works and their respective responsibilities. Contact can be made with the project team via:
Eurwyn Owen (Environmental Coordinator) Tel: 07741 472 523 email: Eurwyn.j.owen@magnxosites.com

Overarching Responsibilities

All members of the project team will be responsible for:

- Ensuring that the contractor complies with the Site's environmental management procedures.
- Proactively approaching environmental issues whilst on site;
- Ensuring full awareness of the environmental procedures in place and proactively raising any questions with the Environmental Co-ordinator;
- Ensuring all activities are carried out in line with the procedures detailed in this document; and
- Reporting any environmental incident to the Environmental Co-ordinator.

3 General Approach

The approach to environmental management on the project will focus on the following:

- Regulatory compliance as a minimum standard; and
- Prevention of environmental incidents by ensuring the development is undertaken with care and compliance in mind.

To achieve this, the project will implement the NRS Environmental Management System (EMS) complying with BS EN ISO 14001 (2015). As a minimum, this Standard commits all activities on the project to complying with all environmental and related legislation in force at the time. The Standard encourages best practice and innovation, as well as a robust management approach based on the principles of Plan, Do, Check, Act and Review. Application of the EMS at Trawsfynydd is monitored and audited by appropriately trained and qualified personnel. Any system failures are documented and appropriate corrective actions issued and implemented.

Relevant documentation shall include the following:

- Site daily Environmental Compliance Checklist;
- Environmental Risk Assessment;
- Site Diary; and
- Training and Responsibilities Matrix.

Environmental inspection of the work area shall be carried out by the Site's Environmental Coordinator.

4 Training and management procedures

To ensure that management, prevention and mitigation methods and measures are applied at all stages of the development, appropriate training and management procedures will be implemented in accordance with

Building Research Establishment's (BRE): The Pollution Control Guide: Part 1 – Pre-project planning and effective management. The BRE guidance makes the following recommendations: "*Before the start of any project, appropriate training on how to control pollution emissions should be given to all personnel expected to be present on site. This training should include:*

- *The benefits of reducing pollution to health and environment;*
- *The benefits of minimising disruption from complaints and enforcement actions;*
- *Methods to minimise the generation of pollution;*
- *Actions plans on what should be done if emissions breach any limits that have been set for the particular site;*
- *Individual responsibilities and management procedures; and*
- *The importance of effective communication between relevant personnel at all levels*."

A pre-start site induction will be given to all site personnel, associated with the work by NRS, and will include a general overview of site-specific environmental issues. All site personnel shall undertake environmental awareness training and if supplementary training is needed over the course of the project, at any phase, it will be provided as necessary by the contractor.

The Site Induction will include a thorough briefing on the following:

- Overview of the project and the surrounding environment;
- Sensitive receptors around the project which could be affected if environmental management is not followed;
- The responsibilities expected of everyone working on the project at every phase of the development;
- The points of contact for training and information on environmental management;
- What to do if an environmental incident is observed; and
- The limits in force via Permits, Licences, Consents and the Planning Permission.

All site personnel with environmental responsibilities shall be suitably trained and qualified.

Detailed information shall be communicated to personnel by means of regular Environmental Briefings and Toolbox Talks covering topics relating to specific site activities. These shall be given to all site personnel at a period of no less than fortnightly.

5 Environmental Aspects

All Environmental mitigations should be documented in the RAMS prior to any work starting and agreed by NRS.

6 Dust Pollution

There is potential for dust arising from the movement, emplacement and compaction of the crushed product. There is also the potential for dust arisings from the use of vehicles on dry and dusty roadways. Therefore, the control of dust arising from these activities will be prioritised through a variety of management and monitoring measures. The works will be conducted in accordance with:

- BRE (2003) Guidance on the Control of Dust from Construction and Demolition Activities; and
- BRE (2003) Controlling Particulates, Vapours and Noise Pollution from Construction Sites.

General mitigation techniques for the various site activities are shown in Appendix B.

On-going monitoring shall be undertaken by the site supervisors on a regular basis, both on and off site for visible signs of dust emissions and deposition originating from the site to ensure the adequacy of the mitigation measures being employed. On-site daily monitoring of dust emissions will be undertaken for any activity which is deemed to pose a risk, with records maintained. Appendix B provides a summary of the monitoring that will be undertaken.

7 Noise Pollution

The main potential noise source from the proposed development is from the use of heavy plant necessary to move, emplace and compact the crushed concrete product.

Mitigation measures will be implemented to ensure effective control of noise from the works. These are industry best practices. The best practices are proven, well established, techniques to mitigate noise impacts. General mitigation techniques for the various site activities are shown in Appendix C.

Condition 8 of the 2003 TCPA permission to construct the ILW Store at the site specifies the noise monitoring that is required for works at the site, at least relating to that permission and that noise monitoring methodology will be adopted for this project. All noise level monitoring equipment used will be well maintained and calibrated in accordance with manufacturer's guidance. Logs of all noise monitoring will be kept within the site files and will be made readily available for inspection.

8 Light Disturbance

NRS will identify appropriate management and mitigation measures to reduce impacts of task specific lighting, if required, upon the surrounding environment. The major mitigating factor is ensuring that lighting is only used during the project working hours, when necessary, and is designed in such a way that it is directed towards the area where it is needed at an appropriate brightness. General mitigation techniques for the various site activities are shown in Appendix D. Given the short duration of the works no formal monitoring programme is proposed.

9 Water Pollution

This part of the CEMP addresses potential impacts and management measures for the protection of groundwater and surface water (streams etc). The objectives are to ensure that the water environment is protected, and that surface water arisings within the site are appropriately controlled and permitted in order to prevent impacts such as localised pollution of watercourses from sediment entrapment.

Reference will be made in all processes and procedures that may result in an impact on water to CIRIA Guidance Document C532 "Control of water pollution from construction sites: Guidance for consultants and contractors". Detailed design and construction planning will include protocols for managing surface water. General mitigation techniques for the various site activities are shown in Appendix E.

There will be a need for fuels, oils and other potentially environmentally hazardous materials to be used in the plant and machinery required for the works.

With the correct storage, management and handling & use of these materials, the risks of spillage or other release to the environment are minimised. There are regulations and best practice guidelines for the correct storage, handling and use of these materials, and NRS' appointed contractor will follow all of these and ensure that subcontractors follow them too.

Liquid pollutants (i.e. fuels and oils) will be minimised on site through minimising the volume of fuel required on site for the work (i.e. only have on site what is required). When these substances are present on site, they will be stored in accordance with the Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016. This requires that all containers capable of storing 201 litres or more of oil or fuels should be stored and dispensed in a secure manner, with fixed tanks being required to meet specific design standards. NRS and its appointed contractor(s) will ensure that these regulations are followed, and will further ensure that containers of less than 201 litres are also stored securely bunded when not in use, and their contents dispensed correctly.

Should a spillage occur, works on that part of the site will cease until the spillage is cleared.

10 Ecology

Ecology mitigation measures, are provided in Appendix F.

11 Waste Management – Waste for offsite disposal

It is not anticipated that any significant amount of waste will be generated during this works, however, should any waste be generated as a result of the work, it will be managed in accordance with standard NRS procedures. Where waste is generated, it will be properly categorised and dealt with in accordance with the Site's Waste Management Procedures.

12 Working Hours

The working hours are:

- Monday – Friday: 06:45 – 18:00hrs (subject to contract agreement)
- Saturday: 07:30 – 13:00hrs (subject to contract agreement)
- Sunday: No works permitted (subject to contract agreement)

Appendix A Environmental Protection Responsibilities

NRS and Contractor's Site Manager:

- Ensure that appropriate resources are in place to effectively implement this CEMP;
- Review and understand this document throughout each phase of the proposed development to ensure it remains relevant and effective in identifying and managing environmental risks; and
- Ensure that all environmental legal requirements and procedures are complied with.
- Report any environmental incident to the NRS Site Engineer or Site Environmental Co-ordinator.

Contractor:

- Ensure that all of their work complies with the NRS approved work instructions i.e. Work order, RAMS, etc.
- Report any environmental incident to the NRS Site Engineer or Site Environmental Co-ordinator.

NRS Site Engineer:

- Ensure that this document, associated documents, and control methods are effectively implemented on site on a day-to-day basis;
- Report any activity that has potential to have an environmental effect immediately to the project manager.

Site Staff & Sub-Contractors:

- Report any environmental incident to the Environmental Co-ordinator.

Appendix B Dust

Control Measures

- All site traffic shall follow specifically designated routes.
- Vehicle speeds on site will be restricted to 10 mph.
- Housekeeping and dust control measures to be deployed on site by the Contractor as necessary.
- Other proactive control measures to be deployed in accordance with the Contractor's Environmental Management Plan.

Dust Control Monitoring

The daily monitoring programme will be implemented in accordance with the Contractor's Environmental Management Plan, and typically could record:

- Date;
- Activity/Location;
- Weather Conditions;
- Wind Direction and Speed; and,
- Dust suppression method(s) implemented.

Appendix C Noise

Control Measures

- All construction plant and equipment shall comply with EU noise emission limits;
- The hours of operation of all plant and vehicles will be limited to daylight hours (including short darker periods at the start and end of the working day during winter months) and within the working hours stated in section 6.7 above;
- No plant or machinery will be left running unnecessarily;

Whilst reversing alarms do present audible impact their necessity reflects the high risk associated with reversing vehicles. They must be distinct to ensure they are audible above background noise. Despite their need, mitigation can be introduced to prevent nuisance to residents. All practicable additional measures will be taken to minimise nuisance from reversing alarms, such as using the industry-accepted ‘quiet’ bleepers.

The site has specific planning noise limits that are recorded at the nearest property which is Ty Gwyn Farm. This is a requirement imposed on the site by Snowdonia National Park (SNPA). Previous activities, of the same nature of this work, and at the same location, has shown that recorded noise levels at Ty Gwyn Farm, have remained below the permitted levels set by the SNPA.

Appendix D Light Disturbance Mitigation Measures

- The use of permanent lighting is not anticipated for this work. It is expected that the majority of activities will be carried out during daylight hours. The use of artificial lighting shall be limited to short periods at the start and end of the working day during winter months;.

Appendix E Water Pollution Mitigation Measures

The following mitigation and best practice will be implemented:

- The positioning of fuel storage tanks and other potentially polluting materials and maintenance/refuelling facilities will be a minimum distance of 10m from watercourses and drainage points, be on areas of hard standing, contained within bunded areas in accordance with the requirements of the Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016. Stored materials on site shall be checked regularly for containment integrity (both primary and secondary), quantity stored and security of storage;
- Spill kits shall be made available, and site operatives trained in their use, to deal with any spillages of materials such as fuels/oils. All spill kits shall be fully stocked at all times and an inventory of equipment within the kit shall be clearly displayed in the kit, and in the Environmental Emergency and Contingency Arrangements document.
- All vehicles and plant and equipment, brought onto site for construction work, are inspected, to ensure suitability for the work and good working condition, as per Contractor's procedures.
- All plant machinery are to be refuelled on a hard standing and not on made up ground.

Substance	Storage requirements	Dispensing/handling requirements	Use requirements
Fuel for mobile plant	Any mobile fuel tank will only be stationed in an area that minimises the risk of it being damaged by impact from passing vehicles. The tank will be double skinned (bunded) and enclosed within secondary containment which holds 110% of the capacity of the container. Any fixed fuel tank to be used must meet the relevant BS or OFTEC standard, located in an area that minimises the risk of it being damaged by impact from passing vehicles. The tank will be double skinned (bunded) and enclosed within secondary containment which holds 110% of the capacity of the container. Daily recorded checks will be made to check the integrity of containers and ensure that secondary containment bunds are empty. No storage facilities will be located within 10m of a drain or watercourse.	Only operatives who have received the following training will be permitted to dispense fuel: • All fuelling activities will be supervised by NRS Site Engineer.	Fuels will only be used in plant and machinery that has been subject to daily pre-start checks to ensure there are no leaks or drips from the equipment. Equipment that is leaking will be taken out of service immediately. All wheeled mobile plant will carry a spill kit for fuels and oils. All smaller mobile plant items (i.e. generators, lighting sets) will have drip trays or plant nappies installed beneath fuel tanks and refuelling points. Tools requiring fuels will be placed on drip trays or plant nappies when not in use, and will be stored in containers or buildings overnight. If any sign of spillage, no matter how small, is observed, it will be cleaned up.

Appendix F Ecology Mitigation Measures

Mitigation and management measures may be required, including but not limited to:

- If invasive non-native species are discovered (note - no invasive species have been identified in ecology surveys to date), they will be removed under the supervision of an suitably qualified and experienced person;
- The use of artificial lighting shall be limited to short periods at the start and end of the working day during winter months;
- Vegetation within the works area shall be maintained at a low level prior to commencement of works to deter ecological receptors;
- The works area shall be inspected by an Ecologist prior to commencement of works for the presence of nesting birds;
- Although mammals and reptiles have not been identified within the works area, precautionary checks shall be completed by suitably qualified and experience person prior to the commencement of works.
- The following pre-works checks shall be completed
    - Nesting birds
    - Mammals (e.g. dormouse, badgers), although none noted on
- A bat survey was undertaken in August 2024 by Cambrian Ecology (Report entitled “Trawsfynydd Power Station Proposed Filling Works, Potential Bat Roost Tree Survey”, dated 8th August 2024). The survey concluded the proposed works would not result in a negative impact to bats, and no mitigation measures were necessary.