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CONVATEC LTD

CONVATEC GREEN MANUFACTURING HUB, RHYMNEY

OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

MARCH 2024

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DATE ISSUED:	**MARCH 2024**
JOB NUMBER:	**BR10167**
REPORT NUMBER:	**1**
VERSION:	**V 0.1**
STATUS:	**DRAFT**

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OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

MARCH 2024

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CONTENTS

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

1.1 Site Location and Description

1.1.1 This Construction and Environment Management Plan has been prepared in support of a Development of National Significance Application (the Application) for the development of the Convatec Green Manufacturing Hub, Rhymney.

1.1.2 The site is located to the west of Rhymney, in Caerphilly, South Wales. The site is positioned at the head of the Rhymney River valley on land east of Gelli-Gaer Common and northeast of Bryn Pyllog Tips.

1.1.3 The site is adjacent to the Heads of the Valleys industrial estate, where Convatec UK has a major manufacturing facility, and the A469 is to the east as shown in Figure 1.1.

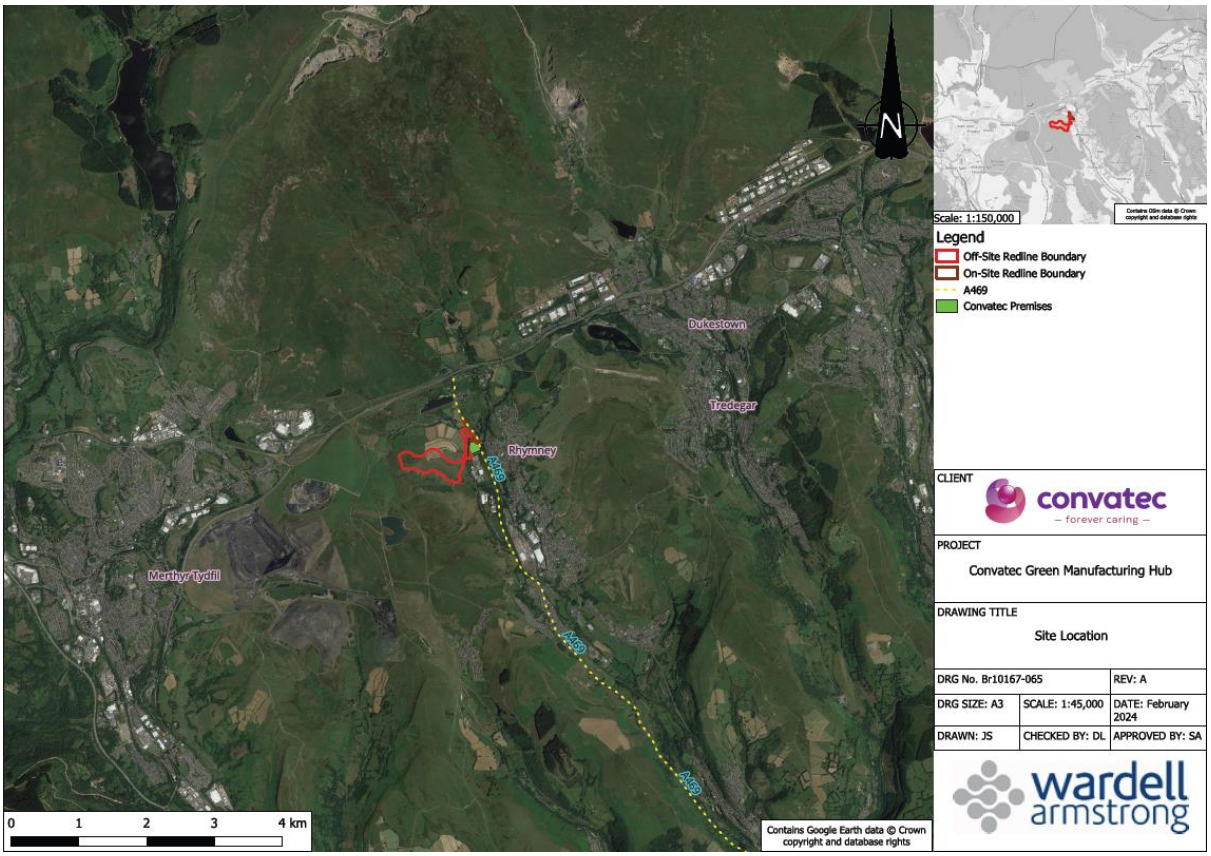

Figure 1.1: Site Location

1.1.4 The Site is broadly bound by the Nant Carno stream, local roads with scattered properties and further improved grassland to the north. The site is adjacent to the Heads of the Valley Industrial Estate, where Convatec has a major manufacturing facility, and the A469 to the east. There are further unimproved grassland and disused

tips to the south and an un-named local road, unimproved grassland and disused tips to the west.

1.1.5 The site is within National Landscape Character Area (NLCA) 37: South Wales Valleys.

1.1.6 There are several Historic Environment Record points in the surrounding area, predominantly relating to Post-medieval and Industrial period activity in the area of the Site.

1.2 Project Description

1.2.1 The project covers the construction of a solar and wind farm with associated infrastructure. The project will have an assumed total installed capacity of 20 MW, which will consist of:

- Three wind turbines of a maximum of 150m tip height, with a combined installed capacity of approximately 15 MW; and
- Ground mounted solar photovoltaic panels with an installed capacity of approximately 5MW.

1.2.2 The Convatec Green Manufacturing Hub (CGMH) will be owned and operated by Convatec Ltd.

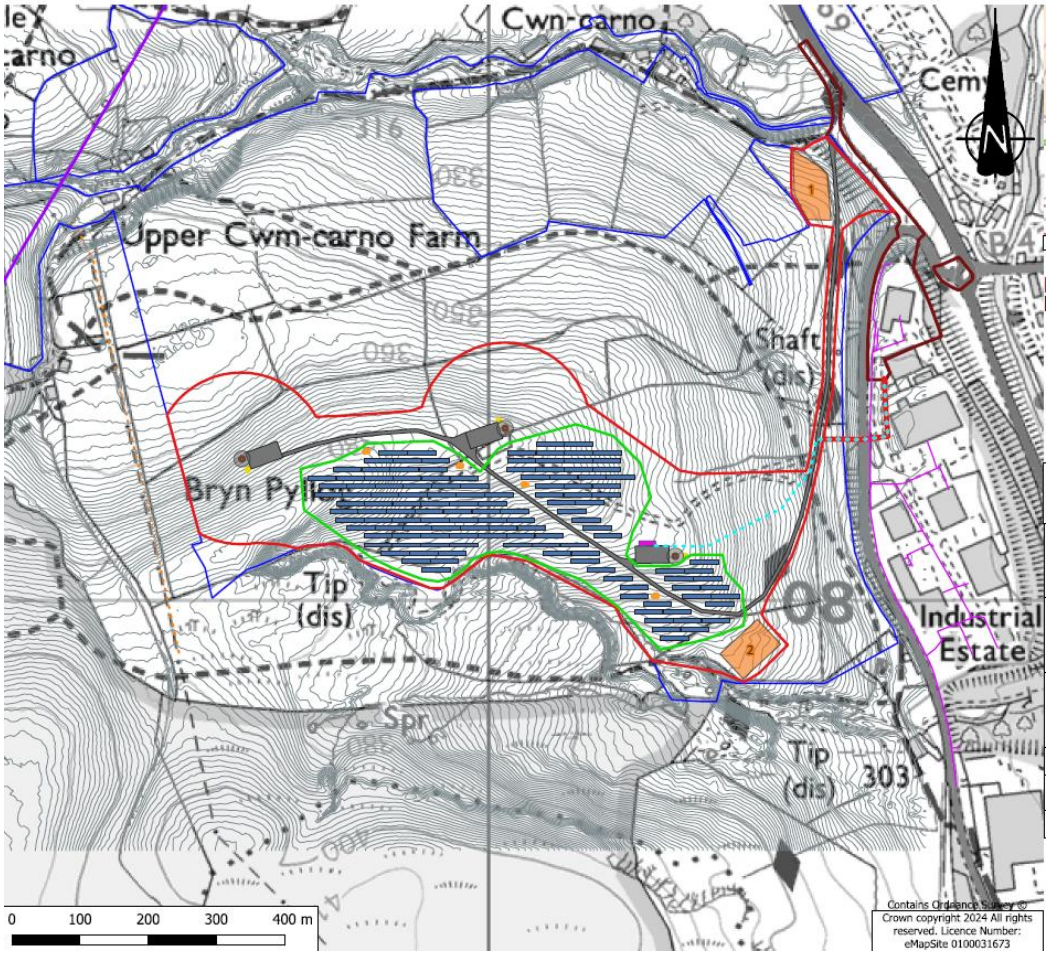

Figure 1.2: Site Layout

1.2.3 The site preparation phase will take approximately six months, and will include site levelling, installation of drainage and environmental protection measures such as impermeable membranes, along with security fencing and appropriate lighting.

1.2.4 The construction phase for the wind turbines, solar PV farm and associated infrastructure is expected to take 6 months to complete.

1.2.5 The Site will be operational for 30 years and will generate approximately 33,000 MWh of electricity for use by the CGMH and the surplus supplied to local businesses via a private wire supply.

2 ASSIGNMENT OF ROLES

2.1.1 Convatec will appoint one or more contractors for various aspects of the construction works required for this project. Normally this will entail appointing a Main Contractor with overall responsibility for the construction process, with a number of specialist sub-contractors involved from time to time. The Main Contractor will be required to

prepare a full construction method statement and CEMP, approval of which by Convatec will be a pre-requisite for a contractual agreement. The Main Contractor and all associated sub-contractors will be required to adhere to the CEMP by a specific contractual requirement under the construction contract.

2.1.2 This CEMP will form the basis of the full CEMP to be prepared by the Main Contractor and sets out Convatec's minimum requirements for environmental protection and management during the construction process. This includes any specific requirements and obligations set out in the Environmental Report, those arising from Consultations and any relevant Conditions attached to a planning approval. The appointed Contractor may also have additional requirements over and above those set out here, together with regulatory compliance requirements, which will be incorporated as appropriate.

2.1.3 The Contractor appointed for construction will be required to hold and maintain for the duration of the contract an Environmental Management System (EMS) certified to EMAS, ISO 14001:2015 or BS 8555:2016. The Contractor will be required to develop and implement a project and site-specific CEMP, based on this framework CEMP and include details of the following:

- Review of environmental aspects and effects;
- Roles, responsibilities, communication, and reporting;
- Operational controls and standards for:
  - Pollution prevention and control (air, land, water);
  - Nuisance prevention (noise, vibration, dust);
  - Construction waste; and
  - Public safety.
- Checking, monitoring and corrective action (emergency response).

2.1.4 An outline Construction Method Statement for the significant aspects of the project is to be produced by Convatec. This is subject to detailed design and method statements prepared by the eventual selected contractors. The anticipated construction phase for the project will consist of the following principal activities:

1. Site investigation, surveying, detailed design and contractor mobilisation.
2. Importation of all equipment to the site.
3. Upgrading of site access and extension/upgrading of site security fencing, access control.
4. Site clearance and grading, excavation for foundations, etc.

5. Construction of the concrete hardstanding areas to support turbine foundations and crane pads, water/emergency fuel tanks.
6. Construction of hardcore/gravel areas for modular buildings, car park facilities, external storage and vehicle manoeuvring.
7. Deployment of modular buildings, tanks, containers and other site structures.
8. Installation of solar panels and inverters.
9. Installation of wind turbines.
10. Installation of the transformers, and DNO, customer substations, and workshop/storage unit.
11. Laying of underground cables and establishment of grid connection.

2.1.5 The construction phase works will be undertaken in approximately the order listed above. However, some of the activities could be undertaken concurrently to minimise the duration of works, optimise equipment use and minimise disturbance.

3 ELEMENTS OF CONSTRUCTION WORKS

3.1 Temporary Construction Compound

3.1.1 The proposed site will consist of a two temporary construction compounds. One will be located along the northern boundary of the site, at the entrance, with the other located at the south eastern corner. The construction compounds will consist of temporary site offices, staff facilities and car-parking areas for staff and visitors. The compounds will typically be constructed as follows:

- The area to be used as the compound will be marked out at the corners using ranging rods or timber posts. Drainage runs and associated settlement ponds will be installed around the perimeter;
- The compound will be established using a similar technique as the construction of the excavated site tracks as discussed below;
- A layer of geo-grid will be installed and compacted layers of well graded granular material will be spread and lightly compacted to provide a hard area for site offices and storage containers;
- Areas within the compound will be constructed as site roads and used as vehicle hardstandings during deliveries and for parking;
- A bunded containment area will be provided within the compound for the storage of lubricants, oils and site generators etc.

- If necessary the compound will be fenced and secured with locked gates, although fencing would only be utilised where significant risk of danger to third parties or vandalism/theft is envisaged; and,
- Upon completion of the project the compound will be decommissioned by backfilling the area with the material arising during excavation, landscaping with peat as required.
- During the construction phase, a self-contained port-a-loo with an integrated waste holding tank will be used on site for toilet facilities. This will be maintained by the service contractor on a regular basis.

3.2 **New Tracks**

3.2.1 A new access track is required to facilitate construction and operational access to the turbine, switchgear and metering building. The access track will be used to deliver turbine components and turbine erection traffic.

3.2.2 The access track will be up to 4.5m wide at the running surface (excluding shoulders/verges, widening at bends, junctions, and crane hardstandings) to satisfy the requirements of the safe operation of construction and turbine deliveries. This is In line with turbine manufacturer guidelines.

3.2.3 The access track layout will be micro-sited to minimise cut and fill and earthworks requirement requirements. This will help to mitigate environmental impacts during the works and visual impact associated with cut slopes and batter.

3.2.4 Stone for the construction of the tracks will be imported from suitable local quarries wherever possible.

3.2.5 Appropriate drainage infrastructure will be provided. The drainage system will use sediment management measures to help mitigate effects on the hydrological environment. Extreme care will be taken throughout the construction stage to minimise impacts.

3.3 **Foundations**

3.3.1 A solar farm has minimal adverse effects on existing ground conditions as the solar arrays only require shallow screw piled mounts. However, the construction of the substations and transformers would require concrete foundations and concrete possesses high alkaline properties. Efforts will be made to prevent contamination by containing and recycling water for washing out concrete mixing trucks and plants. The

construction of the concrete foundation will be monitored, and no pouring of concrete would be undertaken during wet weather conditions.

3.3.2 The turbine foundation details will be designed to suit ground conditions specific to each turbine location and will be constructed of reinforced concrete bases. The turbine will be anchored to the foundation concrete using a cage or anchor ring assembly cast into the concrete. Each foundation will require circa 900m^3 of steel reinforced concrete. The foundation geotechnical design will be based on the information contained in the site investigation interpretative report, and appropriate factors of safety will be incorporated in accordance with European design standards.

3.4 Crane Hardstandings

3.4.1 Hardstandings will be established next to the turbine bases and will be used as laydown areas and as stable platforms for cranes and other vehicles to operate during construction. The area of the hardstandings will be determined by the turbine supplier requirements and the crane contractor.

3.4.2 The blade laydown area will be formed from temporary structures such as bog matting which will be removed on completion.

3.4.3 Hardstandings will be constructed using a cut and fill construction method, similar to the site tracks and will be constructed from crushed aggregate, laid over a geotextile (as required in accordance with the track designers and manufacturers guidelines). The hardstandings will feature a layer of higher quality crushed stone and greater rates of compaction to comply with the appropriate crane lift loadings.

3.4.4 Following successful commissioning of the turbines, the crane hardstandings will be left in situ.

3.5 Electricity Substation

3.5.1 It is proposed to construct an electricity substation towards the east of the site. The substation will be constructed by the following methodology:

- The area of the substation will be marked out using ranging rods or wooden posts and the soil stripped and removed to the nearby storage area for later use in landscaping. No material will be removed from site and storage areas will be stripped of vegetation prior to stockpiling in line with best working practises;

- The foundations will be excavated down to the level indicated by the designer and appropriately shuttered reinforced concreted will be laid over it. An antibleeding admixture will be included in the concrete mix;
- Excavated material will remain on site at all times;
- The block work walls will be built up from the footings to DPC level and the floor slab constructed, having first located any ducts or trenches required by the follow on mechanical and electrical contractors;
- The block work will then be raised to wall plate level and the gables & internal partition walls formed. Scaffold will be erected around the outside of the building for this operation;
- The concrete roof slabs will be lifted into position using an adequately sized mobile crane;
- The timber roof trusses will then be lifted into position using a telescopic load all or mobile crane depending on site conditions. The roof trusses will then be felted, battened, tiled and sealed against the weather.

3.5.2 The substation building is expected to be block-built and rendered with a pitched roof and would have a height of approximately 5m. The detailed design of the substation will be agreed with the DNO and the Planning Authority prior to any works taking place but an indicative plan is also included in Drawing BR10167-109 (Volume 2).

3.6 Method of working cable trenching

3.6.1 Cables will be laid underground. The topsoil will be stripped and deposited on one side of the trench line and subsoil would be deposited on the opposite side of the trench.

3.6.2 Any trenching work which involves machines will only be carried out in presence of a banksman.

3.6.3 The soil will be returned in reverse order, reinstating it to its original state.

4 COMMUNITY ENGAGEMENT

4.1.1 Grasshopper on behalf of Convatec will provide information and ensure appropriate levels of community liaison and stakeholder engagement, to include:

- Community liaison group (CLG) meetings;
- Project website updates;

- Project-specific public meetings;
- Project information booth at public events;
- Leaflet drops and letter updates to nearby businesses and residents; and
- Personal visits to nearby businesses and residents.

4.1.2 The Community Liaison Group is to consist of representatives from Convatec and other project partners, local residents and businesses, nearby community/town councils and Caerphilly County Borough Council. Meetings are to occur at regular intervals throughout the duration of the project to discuss any problems and try to resolve any issues in a timely and appropriate manner.

4.1.3 In the event of any incidents or complaints from adjacent owners, occupiers or the public, the Convatec complaints procedure will be followed, to be developed following grant of planning permission. This may include immediate notification to any relevant regulatory body, including the nature and details of the issue as well as the proposed responses and actions. Full disclosure of the circumstances, causes, impacts and consequences of the event will be required, and will be reported to the Environment Agency, as appropriate.

5 ENVIRONMENTAL ASPECTS & EFFECTS

5.1.1 The following is a compilation of all identified relevant environmental aspects and effects, along with the applicable criteria, standards, monitoring arrangements and response/corrective procedures, arising from:

- Significant issues, effects and impacts identified in the Environmental Report submitted with the planning application, or during consultation, attributable to the construction stage and manageable or mitigated by operational controls;
- Conditions attached to the planning permission; and
- Regulatory and compliance standards – site specific or generic as appropriate.

5.2 Working Hours

Construction

5.2.1 The working hours for the enabling works, excluding drilling operations, are anticipated to be set by the planning authority as follows:

- Between 0700 and 1900 Monday to Fridays inclusive.
- Between 0700 and 1300 Saturdays.
- There shall be no working on Sundays, bank holidays or public holidays.

5.3 Emissions to Air

Construction

5.3.1 The low number of site vehicles associated with the Proposed Development are not anticipated to adversely impact on local air quality.

5.4 Dust Management

Construction

5.4.1 There is expected to be small and localised emissions of dust from construction vehicles. The following mitigation measures will be implemented to minimise dust emissions:

- Covering of soils during transportation;
- Regular inspection and, if necessary, cleaning and repair of local highways and site boundaries to check for the soil/dust deposits (and removal if necessary);
- Where practical, use of mobile or fixed spray units to dampen surfaces of soil as indicated by weather conditions;
- Keeping soil stockpiles or mounds away from the site boundary and, where possible, enclosing soil stockpiles or keeping them secure sheeted;
- The adoption of best practicable means to ensure dust and fumes from the site are suppressed;
- The mobile plant will be regularly serviced in accordance with planned maintenance regimes and equipped with exhausts to prevent fume emissions;
- Haul roads maintained to minimise the potential impact of re suspended dust emissions;
- Use of a water bowser during dry conditions on the access road and any other trafficked or bare earth areas; and
- Vehicle speed control on access and other trafficked areas implemented by the Site Manager and must be adhered to with due regard to weather and ground conditions in order to reduce fugitive dust generation.

5.5 Effects on Water Resources

Construction

5.5.1 The site is entirely located within flood zone 1 and therefore this site is suitable for development in terms of fluvial flood risk. The site is at low risk of flooding from all other sources. The flood risk to the development is considered to be low overall.

5.5.2 To ensure that the development does not have any adverse offsite impacts and does not increase flood risk elsewhere, surface water runoff will be sustainably managed and disposed of using SuDS techniques.

5.5.3 The surface water drainage strategy will consider other SuDS and incorporate SuDS principles wherever possible. An oil separator, infiltration trenches and filter drains has been included in the design to provide further enhancement to the water quality of surface water runoff. The Flood Risk and Drainage ES chapter will provide further detail.

5.6 Noise

Construction

5.6.1 The noise emission from the operation of the wind turbines was the focus of the Noise ES chapter, as this was identified as the potentially most significant noise effect associated with the project. Although this will remain below the guideline threshold for temporary construction work, with the incorporation of appropriate mitigation measures and management.

5.6.2 Any noise-generating plant can be contained and/or sound-proofed to ensure no disturbance to the residential amenity of the area. If managed correctly, no maintenance activity will be noise generating.

5.6.3 With mitigation measures in place, the noise generated by the proposed development will have a low and not significant impact during the daytime and night-time periods at the existing sensitive receptors.

5.7 Soils

5.7.1 The proposed development comprises of Grade 5 (non-best and most versatile) land across the 26 ha site.

5.8 Ecology

Basic Requirements

5.8.1 The Contractor shall incorporate the specific requirements of all recommended ecological mitigation measures.

5.8.2 This section of the report must be reviewed in detail prior to any construction phase on the site.

Background

5.8.3 The Conservation of Habitats and Species Regulations 2017 (as amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) makes it an offence to intentionally capture, injure or kill any wild animal of a protected species, deliberately disturb species and / or damage / destroy their breeding or resting places, take or destroy eggs of such an animal, and to possess, control, sell or exchange, or transport for the purposes of sale. This legislation emphasises the need for strict adherence to the mitigation measures specified in this CEMP.

5.8.4 The potential for adverse impacts will be minimised as far as possible through the application of good practice techniques and adherence to well-designed method statements managed through the CEMP and relevant ecological mitigation measures. The ecological risk assessment and strategy is outlined in **Table 5.1**.

Specific Requirements

5.8.5 The purpose of this CEMP is to specify the measures to protect ecological receptors prior to and during the construction phase.

Requirements

5.8.6 The Contractor shall incorporate the specific requirements of all recommended ecological mitigation and monitoring measures.

Table 5.1: Ecological Risk Assessment and Management			
Receptor	**Risk Assessment**	**Risk Management**	**Monitoring**
Bats	Potential for disturbance for foraging or commuting bats during construction works.	Noise (refer to Section 5 of this CEMP) and lighting levels associated with the construction activities will be kept to a minimum where possible. Night-time working will be avoided, except where strictly necessary. There will be no direct illumination of border habitats including scrub/woodland and banked earth. Lighting onsite will be cowled and turned down, to ensure minimal light pollution out from the site.	Site Manager Site Manager Site Manager
Red Kite	Potential breeding and foraging habitat may be lost or disturbed by the proposed development.	Any vegetation clearance should be undertaken outside of bird breeding season (March to August, inclusive). If this is not possible, then prior to clearance (a maximum of 48 hours – preferably 24 hours), areas of vegetation will be checked by a suitably qualified ecologist for the presence of occupied nests. Any subsequent advice provided by the ecologist, as to how to accord with legislation, will be followed.	Site Manager to inform when EcoW required (i.e. any vegetation removal).

Table 5.1: Ecological Risk Assessment and Management			
Receptor	**Risk Assessment**	**Risk Management**	**Monitoring**
Kestrel	Potential breeding and foraging habitat may be lost or disturbed by the proposed development.	Any vegetation clearance should be undertaken outside of bird breeding season (March to August, inclusive). If this is not possible, then prior to clearance (a maximum of 48 hours – preferably 24 hours), areas of vegetation will be checked by a suitably qualified ecologist for the presence of occupied nests. Any subsequent advice provided by the ecologist, as to how to accord with legislation, will be followed.	Site Manager to inform when EcoW required (i.e. any vegetation removal).

6 ROLE, RESPONSIBILITIES, COMMUNICATION & REPORTING

6.1.1 Convatec will have overall responsibility for the project. However, each phase of works will have a sub-contractor to which the specific responsibility will be delegated.

6.1.2 The Contractors Director responsible for the site will have overall responsibility for the development and implementation of the CEMP and will allocate specific responsibilities to the Site Manager and support staff for environmental management, co-ordination, and reporting.

6.1.3 The Contractor will erect a notice or sign at the site entrance (or include on a general site notice), clearly visible from the public highway, giving the name and 24/7 contact details of the Site Manager, for the reporting of concerns, incidents or complaints.

Environmental Co-ordination

6.1.4 The Site Manager (SM)/support staff responsibilities will include liaising with the project team to ensure compliance with environmental requirements as well as planning, implementing, and reporting the environmental monitoring of noise and dust, as required. This will be completed via environmental audits and inspections. The SM/support staff are also responsible for the dissemination of environmental information and maintaining awareness of the work force of the environmental implications of their actions including delivering environmental training and calling upon the Ecological Clerk of Works (ECoW) as required e.g. delivery of toolbox talks/ implement pre-construction checks (see further details in this section). The support staff will report non-compliances to the SM and will, as far as reasonably practicable, attend any environmental incidents on the site. Incidents and non-conformances will be corrected, and preventative action implemented. The SM/support staff will aid in developing and reviewing the CEMP and relevant procedures including risk assessments and method statements, ensuring all environmental standards and commitments are adhered to, including carrying out the relevant/necessary environmental induction and training. Attendance at formal contract progress meetings and liaison with third-party interest groups is required.

Ecological Clerk of Works

6.1.5 The Ecological Clerk of Works (ECoW) appointed for the project shall be responsible for:

- Working with the Site Manager/support staff (Environmental Co-ordinator) to review, update and maintain all relevant ecological mitigation and method

statements throughout the works;

- A watching brief on the site and monitoring as outlined in the mitigation management plans and relevant method statements; and
- Reporting to the SM/support staff (Environmental Co-ordinator).

6.1.6 The ECoW job role will be undertaken by a suitably qualified Ecologist.

6.1.7 All the various reports, assessments and method statements relevant to the site must be considered when reviewing environmental management requirements. All stipulations outlined within the associated documentation should be adhered to.

6.1.8 The Contractor will appoint various consultants to provide support on the many different elements of the project (i.e. heritage, waste, air, noise, earthworks etc.). The ongoing consultations will provide Convatec and the Contractor with knowledge on how to best manage environmental risk identified at the site.

6.1.9 All site-based staff have a role in following good practice and being responsible for carrying out their activities without detrimental effects on the environment. Staff should comply with systems of work and undertake tasks in accordance with their training. All site-based staff are responsible for reporting any environmental concerns and incidents to their supervisors, including suggestions for improvements.

6.1.10 Convatec will ensure that all relevant environmental documentation is communicated to the Contractor and appointed Site Manager. Convatec is responsible for setting the standard for environmental management onsite, as stated in the contracts, and should report any environmental concerns and respond appropriately to incidents.

7 OPERATIONAL CONTROLS & MONITORING

7.1 Vehicle Management

7.1.1 Following planning approval for the Proposed Development, further detailed discussions would be carried out with the Highways Authorities by the nominated suppliers and roadwork sub-contractor to agree any variations or additions to the Construction Traffic Management Plan (CTMP) as proposed in the Transport Statement. The measures are summarised below and need to be implemented from the beginning of pre-construction and maintained throughout the construction process:

- **Designated CTMP Coordinator** - The CTMP will have a dedicated point of contact, the CTMP Coordinator. It is the responsibility of the Principal Contractor to appoint the CTMP Coordinator and ensure one remains in-post for the duration of the construction period. This role would usually be undertaken by the Principal Contractor Site Manager, but this is not a necessity. The CTMP Coordinator acts as the promoter of the CTMP to the construction staff and visitors and provides a key point of contact.
- **Construction Traffic Routing** - All contractor and delivery traffic will be required to follow the one-way construction traffic route. Construction traffic movements (equipment and materials) will, when possible, be scheduled to avoid the peak traffic periods at the beginning and end of each day and other sensitive periods, in order to minimise any potential disturbance to local traffic. Haulage contractors undertaking deliveries to the site will be informed of the route by the site manager as part of their delivery instructions (and signage along the route will reinforce this information). Contractor staff will be given the construction route as part of their joining instructions. It is the responsibility of the CTMP Coordinator to ensure that all visitors to the site are aware of the construction traffic route prior to travelling to the site.
- **Signage Strategy -** Signs will be placed on the highway prior to commencement on the site, to direct construction traffic from the A469 and away from local communities, and to warn other road users of HGV turning manoeuvres in the vicinity of the site.
- **Unloading and Loading -** During the construction phase, all unloading and loading of materials and plant will be undertaken within the site compound. The CTMP Coordinator will ensure that a clear turning area is maintained at all times within

the compound. Load frequency will be strictly managed to ensure no queues outside of the site.

- **Contractor Parking -** All contractor parking will be provided within the construction compound. It is estimated that at the peak of construction activity, there may be demand for circa 20 car and van parking spaces within the site. The CTMP Coordinator will ensure that sufficient space is provided within the compound for these vehicles to park, whilst maintaining sufficient space for material and plant storage, loading and unloading and turning of HGVs.
- **Delivery Times** - Deliveries will be scheduled to minimise interaction with other vehicles on the surrounding road network. The strategy is to avoid times when general contractor staff traffic is arriving/departing the site and to avoid peak periods on the local highway network. Deliveries will be scheduled to take place between the following times: Monday – Friday: 07:00 – 19:00 and Saturday: 08:00 – 13:00.
- **Wheel Washing -** Suitable wheel washing facilities will be provided at the exit of the construction compound. Vehicles exiting the compound onto the access track will be required to utilise the wheel washing facilities to prevent any transfer of material from the access track to the A469, to minimise disruption to other local traffic.
- **Vehicle Safety** - The safety of road users is a number one priority therefore the discussed traffic calming measures are being implemented to improve the overall safety of all roads in the vicinity of the site, slowing traffic to the designated speed limits or lower. There will be no vehicle idling and an internal speed limit of 5mph. Vehicular movements will occur only during standard working hours 07:00-1900 (Monday to Friday and 08:00-13:00 Saturdays). Site personnel will be encouraged to car share with contractors using a small number of minibuses to minimise vehicles on the site. During long-term operation, the site will have only a small number of personal vehicles on site during working hours. If any transfer of material from the site to the A469 does occur, a road sweeper will be used to clear any debris to minimise any skid risk on the highway.

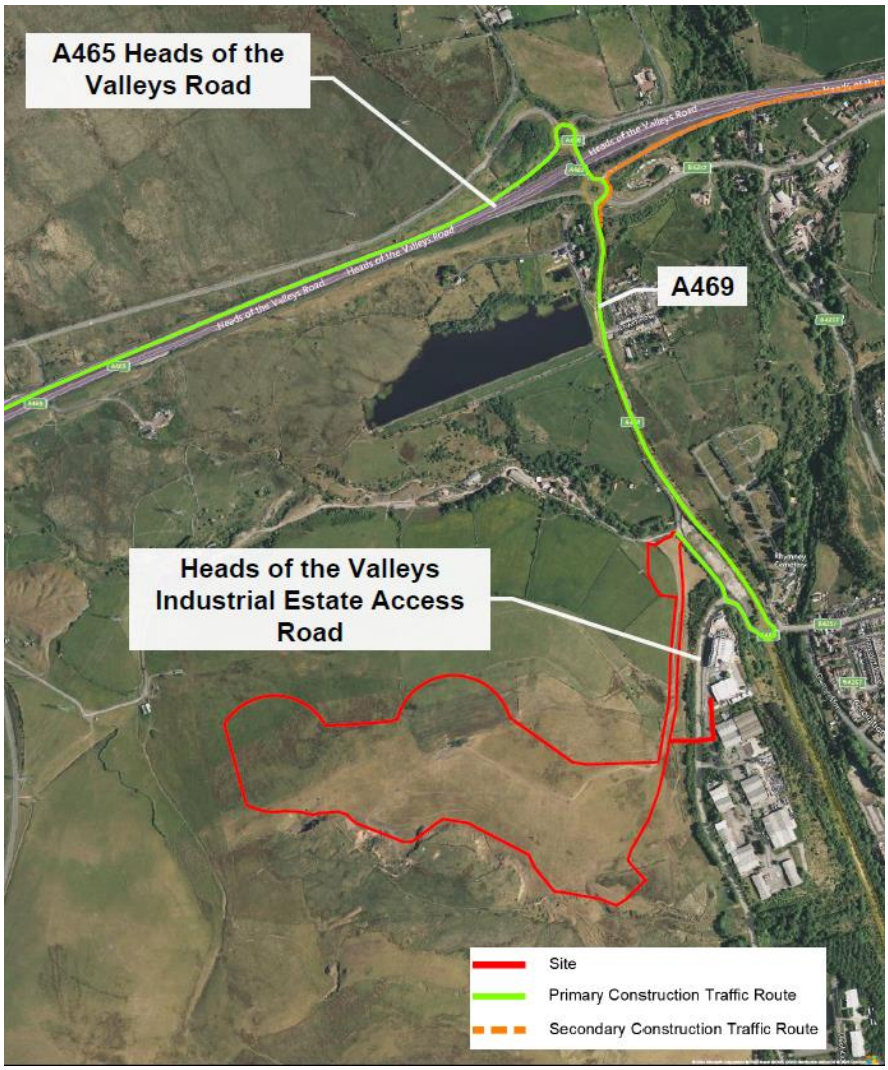

Figure 7.1: The Site Access Route

7.2 Pollution Prevention & Control

Air Pollution

7.2.1 Vehicles are to be requested to not have their engine idling when on the site.

Dust Control

Construction Phase

7.2.2 Dust suppression is the application of liquid, such as water, to restrict the airborne dissemination of fine particles. Dust suppression will be in operation at the site, with damping down to take place as required.

7.2.3 Dust control will be required and is likely to include:

- Covering of soils during transportation;

- Regular inspection and, if necessary, cleaning and repair of local highways and site boundaries to check for the soil/dust deposits (and removal if necessary);
- Where practical, use of mobile or fixed spray units to dampen surfaces of soil as indicated by weather conditions; and
- Keeping soil stockpiles or mounds away from the proposed development site boundary and, where possible, enclosing soil stockpiles or keeping them securely sheeted.

Water Pollution

Construction Phase

7.2.4 Where needed, run-off from storage areas will be intercepted by shallow cut off drains with pollution prevention measures. Any floating or settled solids separated from run-off will be stored separately from other soil types before being decontaminated if necessary and reincorporated into the works as backfill or reinstated in another place on the site.

7.3 Noise

7.3.1 Measures to protect prevent unnecessary noise include, but are not limited, to:

- Working time restrictions, as indicated within this document.
- All equipment being maintained in good order and used and serviced in accordance with the manufacturer's recommendations.
- Machines in intermittent use shall be shut down in the intervening periods between work or throttled down to a minimum. Generators, pumps, and compressors shall be run only when necessary.
- The PM would ensure that all equipment is fitted with suitable exhaust silencers and/or muffler equipment and that enclosure panels are kept closed whilst the equipment is in use.

7.4 Waste Management

7.4.1 Prior to the commencement of any construction activities on the site, a Site Waste Management Plan (SWMP) will be prepared by the Principal Contractor. The SWMP will provide details on how waste reduction is to be implemented on the site and how this is monitored during the construction phase. The SWMP will include, as a minimum:

- The different waste streams and estimates of expected waste volumes for each;

- Procedures to minimise volumes of each waste type produced;
- Identification of waste management actions for each waste type including re-use, recycling, recovery and disposal;
- Procedures for off-site disposal e.g. Waste Transfer Notes; and
- Persons responsible for implementing and monitoring the SWMP.

7.4.2 All solid waste arising will be segregated on the site as appropriate, with separate containers for recycling paper, card, plastic, glass, organic (compostable), wood and metal materials. Non- recyclable material will be segregated into inert, non-inert and hazardous waste. All waste containers will be clearly labelled, including hazard signs if appropriate.

7.4.3 Liquid waste will be stored and/or tankered off the site to suitable facilities. Waste oil productions: diesel, oils, hydraulic fluids, solvents, etc., will be recycled via commercial recycling facilities.

7.5 **Public safety**

7.5.1 The site will be securely fenced to prevent public access.

7.5.2 There are no public safety concerns beyond the site perimeter or within the site that are additional to those typical of construction sites.

7.6 **Lighting**

7.6.1 The Principal Contractor will provide suitable lighting both at the site compound and within the construction area. Illumination would be sufficient for the safety of construction area personnel.

7.6.2 Lighting would be directional with care to minimise potential for light spillage beyond the construction area and would be designed with reference to the 'Eurobats guidance on bats and artificial light' (2018). Light can be restricted to selected areas by fitting hoods which direct the light below the horizontal plane, at preferably an angle less than 70 degrees.

7.6.3 Lighting would be switched off when not required and only operate when access to the construction area is required. The perimeter would not be illuminated, and unnecessary spillage of light and upward lighting would be avoided. Nighttime working (if undertaken at winter) would be minimised during the construction phase.

7.6.4 The site comprises of upland farmland situated on rolling hills. Sensitive receptors are considered to be adjacent properties but due to the topography and distance of the site nuisance from artificial light is considered to be minimal.

7.6.5 Aviation Obstruction Light Systems are required at hub height for safe aviation navigation.

7.7 General housekeeping

7.7.1 The general housekeeping measures will include, but not be limited to, the following:

- Clear access routes with appropriate signposting
- Segregated and regular removal of waste, including food waste
- Keep site clear and tidy
- Visually inspect plant, equipment and material storage areas for leaks and spills
- Keep toilet, changing and drying facilities clean

7.8 Storage of oil and fuel

7.8.1 Minimal amounts of fuels and oils would be stored at the site compound. These would be stored in secure designated storage areas and in accordance with the appropriate regulatory requirements. This includes storing fuels on an impermeable base within an oil-tight bund, which would be capable of containing 110% of the volume of the oil container. The bunded area would be cleared regularly to limit the build-up of residues and if necessary, waste would be disposed of through a specialised contractor.

7.8.2 To prevent materials leaking from static plant, such as pumps and generators, contaminating the ground and being washed into watercourses, static plant would be placed on drip trays wherever practicable.

7.8.3 Any oil or similar material would be cleaned immediately if spilled, using appropriate absorbent material to prevent it entering any local watercourse. Oil spill kits would be provided and training on their use given to all construction area personnel.

7.9 Spill kits

7.9.1 Spill kit location points must include and have access to the following equipment and information:

- Absorbent granules, wipes, and socks;
- Drain covers;

- Plastic bags for used spill kit materials;
- Plastic bunds or trays;
- Relevant and up-to-date material safety data sheets; and
- Shovels and brooms.

7.9.2 Spill kits would be made available in the following locations:

- Adjacent to all fuel storage and refuelling areas; and
- All mobile plant.

8 EMERGENCY RESPONSE AND CORRECTIVE ACTION

8.1.1 Prior to any construction works, an Environmental Incident and Emergency Response Plan (EIERP) will be prepared, in accordance with GPP21: Pollution Incident Response Plans (2017). This plan will detail the events and levels that constitute an incident that would require an emergency response, as well as the procedures for dealing with it. Examples of incidents and emergency responses that will be included in the EIERP would be detailed in the CEMP.

8.1.2 The EIERP will be communicated to all workers. All workers will be trained in environmental incident and response procedures and made aware of environment risks.

APPENDIX 1

EXAMPLE EMERGENCY SPILLAGE PROCEDURES

Title: Spillage Response

Date:

Date to be reviewed:

1. **Procedure Number:**

2. **Supporting Documents:**

3. **Objectives:**

   The purpose of this guideline is to prevent accident and injury to personnel, property damage and harm to the environment by ensuring an assessment of all know hazards, good planning, precautions and communications are done prior to starting task.

4. **Individual Responsibilities:**

   It is the responsibility of each individual to comply with and adhere to these guidelines that have been put into place. Should this procedure need to be changed, corrected of modified, it must be done with the approval of the Rig Manager or senior person on the site.

5. **Tools/Equipment Required:**

   Individual PPE
   Spillage containment and clean up materials

SPILLAGE OF CHEMICAL, FUEL OR OIL ON SITE.

The following actions need to be taken when spillages occur that may have the potential to damage the
environment:

1. Once identified, the spillage shall be assessed, and the situation reported to the site management immediately.
2. Whilst assessing the situation, consider what the source of the pollutant may be and its potential to soak into the ground or into a watercourse. If possible, identify whether the spillage has ceased or if it is continuing to flow, and whether it is safe to stop it. Identify What PPE you will require to work on containment or clean-up operations
3. The relevant supervisor should decide what resources are required to ensure the incident is dealt with efficiently.
4. If appropriate, consult the specific spillage procedure for the chemical concerned, and follow the actions identified. (Hazard data sheets, COSHH, PPE requirements, etc). **These are available in the [enter location].** Avoid contact with the spilled material at all times.
5. Small spillages may be dealt with by spreading absorbent granules or use of pads/rolls and excavating the area affected. **Spillage kits are located [enter location].** Additional materials are contained in the **[enter location]**.
6. For large spillages, a barrier should be created to prevent any pollutants from reaching any water course, drain or sewer. The use of absorbent materials, booms etc should be used to contain and absorb the spillage. **Where spillage has entered the ditch surrounding the site it will be necessary to prevent it flowing beyond the interceptor**. This can be achieved by blocking the interceptor outflow or by damming the ditch with materials provided.
7. Ensure senior management have been informed of the incident in order for them to evaluate whether the incident is reportable to the Environment Agency or other regulatory bodies. The company HSE Supervisor will undertake any subsequent reporting required.

8. If necessary, arrange for appropriate liquid/hazardous waste disposal contractors to attend the site and clear the spillage. The nominated contractor is:

   [ENTER CONTRACTOR]
   [EMERGENCY CONTACT DETAILS]

9. Where the spillage has been contained and absorbed with absorbent materials pads/booms/granules etc, or the site surface, such contaminated materials should be collected/excavated and stored in appropriate containment to prevent further pollution, and segregated from other wastes.
10. It may be necessary to sample the contaminated material, and have it tested to ascertain whether it is considered hazardous.
11. Once the nature of the material has been determined, it should be taken to an appropriate disposal/recycling facility, by a suitably licensed registered waste carrier, as soon as reasonably practicable.
12. When practicable, the incident must be formally investigated, recorded and reported using the appropriate forms, including circulation to the relevant authorities.
13. Monitor the condition of the site to ensure all the corrective actions have been effective.

[NAME]
Site HSE Supervisor
[DATE]

ON DISCOVERING A SPILLAGE ON SITE IDENTIFY THE SOURCE.

INFORM SITE MANAGEMENT.

IF SAFE TO DO SO, WEARING APPROPRIATE PPE AND AVOIDING CONTACT WITH THE SPILLAGE, STOP IT AT SOURCE. (MSDS SHEETS ARE IN THE [ENTER LOCATION]).

INSTIGATE CONTAINMENT AND CLEAN UP, WEARING APPROPRIATE PPE AND AVOIDING CONTACT WITH THE SPILLAGE. CONSULT SPECIFIC SPILLAGE PROCEDURES FROM MSDS SHEETS. (MSDS SHEETS ARE IN THE [ENTER LOCATION]).

ABSORBANT MATERIALS ARE AVAILABLE FROM THE BINS ADJACENT TO THE OIL STORE AND THE PPE STORE.

COLLECT ALL CONTAMINATED MATERIALS FOR SUBSEQUENT DISPOSAL.

IF NECESSARY, BLOCK THE SITE DITCH AT THE INTERCEPTOR TO PREVENT RUN OFF BEYOND SITE.

ARRANGE COLLECTION OF CONTAMINATED MATERIALS AS SPECIAL WASTE IF REQUIRED.

([ENTER ENVIRONMENTAL SERVICES], [EMERGENCY CONTACT DETAILS]).

CHECK AND MONITOR THAT SPILLAGE HAS CEASED AND HAS BEEN CONTAINED.

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