
Otter Avoidance, Mitigation & Compensation Strategy

FIVE FORDS GLASSHOUSES, WREXHAM

7th September 2020

SCALES Consultancy Ltd

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Balancing Ecology and Development

Client

Greenlight Environmental

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1.0 INTRODUCTION

SCALES Consultancy Ltd designed an Otter avoidance, mitigation and compensation strategy for Greenlight Environmental further to comments made by Natural Resources Wales addressed to Wrexham County Borough Council on the 27th August 2020 in a consultation process in relation to a planning application for a Glasshouse and associated development by Low Carbon farming 2 Limited.

1.1 Site Context

The site is accessed off Sesswick Way, a busy road to the south of Wrexham Industrial Estate. The site centre is at NGR SJ3688847980.

1.2 Site Description

The site currently comprises a large arable field divided into two separate compartments separated by a track bordered by a hedgerow and public right of way. Surrounding the site are a number of woodlands including mature woodland, ponds, river, mature trees and hedgerows.

1.3 Proposed Development

The proposed development will consist of two 8ha commercial glasshouses for growing salad and vegetable produce, comprised of structural steelwork and high specification glass designed for maximum light transmission. There will be a packing facility, energy centre, associated underground pipework and two reservoirs for the attenuation of rainwater from the glasshouse roofs.

1.4 Habitat Losses

The total permanent land losses to facilitate the development are predicted to be **21.74ha** with **1.948ha** of land temporarily disturbed and reinstated. A total of **7.7ha** of high quality mitigation habitat will be created. A long term sustainable management plan will be implemented to promote species and habitat conservation.

1.5 Evaluation

An evaluation of the significance of Otter at the site and potential effects and impacts of the development on this species is made in this document.

1.6 Mitigation and Avoidance of Harm Strategy

A strategy has been designed to ensure the avoidance of harm to Otter and their habitat. Implementation of mitigation, avoidance and compensation measures set out in this document will aim to ensure their long-term protection along with that of their habitat.

2.0 REVIEW OF STATUS

2.1 Background and Desk Review

Protected sites

The EclA found the following information with regard to protected sites and records for otter:

Statutory

There are two statutory protected sites located within 2km – one Sites of Special Scientific Interest (“SSSI”) and one Special Conservation Area (“SAC”).

i. River Dee SSSI, approximately 2km southeast.

*“The River Dee is notified for its nationally important transition through a range of river types from mesotrophic to eutrophic. It is also notified for Atlantic salmon *Salmo salar*, otter *Lutra lutra*, club-tailed dragonfly *Gomphus vulgatissimus* and fluvial geomorphology.”*

ii. River Dee & Bala Lake SAC, approximately 2km southeast.

“The River Dee has its source in Snowdonia at the outflow of Llyn Tegid and it includes the Ceiriog Meloch, Tryweryn and Mynach tributaries. Its catchment contains a wide spectrum of landscape from high mountains around Bala, rugged peaks near Llangollen, steep sided wooded valleys, and the plains of Cheshire, Flintshire, north Shropshire and Wrexham.”

Records

Thirty-four otter *Lutra lutra* records were returned by Cofnod North Wales Environmental Information Service on the 15th May 2020 within 2km of the proposed development site.

The most recent was to the west of the proposed development site and from 2019. The closest record is located approximately 160m north-east.

2.2 Legislation

The Eurasian otter *Lutra lutra* is the only native UK otter species. It is fully protected under EC Habitats & Species Directive, Annex II and IV and schedule 2 of The Conservation of Habitats and Species Regulations 2017 and therefore classed as a European protected species (EPS). In addition, the otter is also protected under sections 9 and 11 of the Wildlife and Countryside Act 1981 (as amended) listed on Schedule 5.

It is an offence to deliberately or recklessly:

- capture, kill, disturb or injure otters;
- damage or destroy a breeding or resting place;
- obstruct access to their resting or sheltering places;
- possess, sell, control or transport live or dead otters, or parts of otters.

The Otter is also considered a Biodiversity Action Plan (BAP) ‘Priority Species’ and ‘Species of Principal Importance’ for the conservation of biological diversity in Wales under Natural Environment and Rural Communities Act 2006, s42.

2.3 Impacts

The EclA identified ecological potential impacts in relation to protected species:

The potential impacts on ecological receptors during construction and operation of the proposals are identified and described in the EclA in terms of potential magnitude and probability.

Potential impacts during construction include:

- Direct harm from construction machinery.
- Pollution and waste during construction.
- Loss of habitat during construction works (this impact would continue into the operation phase of the development).
- Reduction in quality of neighbouring habitat (through disturbance) during construction works.

Potential impacts during operation include:

- Disturbance from operational activities.
- Pollution and waste from operation of the site.
- Disturbance from vehicular access activities.
- Loss of habitats occupied by the development (a continuation of the impact during the construction phase).

2.4 Proposed Work and Proximity of development

A trench with a total working area of approximately 20-30m width to include for vehicular access for the purposes of an underground pipeline installation is proposed to be undertaken approximately 5-15m from the banks of the River Clwydog. These works are temporary in nature and reinstatement of habitats will be implemented following completion of the work. The nearby habitats are described as woodland along the river corridor and arable farmland. Only the arable land will be directly affected by excavation and pipeline installation a distance of approximately 5-15m from the river corridor. Land within 200m of the river corridor that will be affected comprises arable, woodland, scrub and grassland. More distant habitats include ponds, arable land, woodland, hedgerows, scrub and grassland.

Although the River Clwydog is situated adjacent to the northern boundary and provides suitable habitat for water voles and otters, the EclA found that otter will not be directly impacted by the proposed development.

Section 6.25 of the EclA specifies that.....

‘Therefore, we predict neutral impacts on water voles and otters are probable’.

It goes on to state....

‘As a precautionary measure, the following mitigation is recommended to avoid impacts on water voles and otters from the proposed works:

i. A 5m no-work buffer zone (includes vegetation clearance) to be applied from the top of the riverbank, to protect potential water vole burrows and prevent pollution/run-off from entering the watercourse. This area will be marked using a temporary barrier netting.

ii. If proposed works change to incorporate this area, further water vole surveys should be conducted prior to work commencing to inform a detailed mitigation strategy. After these precautionary mitigation measures, we predict no impact on water voles or otters from the

development plans. We consider that a European Protected Species Mitigation Licence will not be required, and no further surveys are necessary'.

As well as the above measures set out in the EclA, further consideration has been given to additional appropriate measures. A specific strategy aimed at an avoidance of harm approach along with mitigation and compensation measures are set out in **Section 4.0** of this report.

2.5 Establishing the Need for Further Survey Requirements

Natural England guidelines 6 October 2014 (updated 5 April 2019) advise that a survey for otters is required if:

- distribution and historical records suggest otters may be present;
- the development will affect a water body (e.g. river, stream, lake, sea or marshland);
- development will affect habitats near a water body directly or through environmental impacts, for example noise and light.

2.6 Standard Otter Survey Methodology

Surveys should be undertaken by a suitably experienced surveyor. Depending upon the nature of the surveys, it might be advisable if the surveyor holds an appropriate licence.

During the survey, a search for evidence of otters should be undertaken. Evidence with reference to NE guidelines updated 5 April 2019 includes:

- dung (spraints)
- tracks (footprints)
- feeding remains
- otter slides (into water)
- holts (underground dens)
- couches (above ground sites where otters rest during the day)

Surveys can be undertaken at any time of the year with spring being the optimum time. Survey requirements are usually tailored to the:

- Nature and types of impacts of the development on otters and their habitat;
- The likely predicted effects of the impacts upon otters and their habitat.

The information collected can then be used to devise mitigation measures.

2.7 Proposed Survey Protocol and Recommendations

Existing records of otter within 2km of the proposed development site have been studied.

Existing otter records and habitat survey information have been used to devise mitigation and avoidance measures and assess the need for further survey.

Pre-commencement of development and construction surveys will be undertaken to establish whether new signs or activity are present.

The results will form the basis of any adjustments deemed to then be required to the avoidance and mitigation proposals presented in this document.

2.8 Other Considerations

Local badger activity and known records within 2km of the site have been identified. All otter deterrent and protection fence will need to take account of the potential presence of badger. Badger and otter surveys are recommended prior to the commencement of any ground works including the erection of newt and/or badger fencing. Should any proposed otter (or GCN) fencing work be required within 30m of a badger sett or if otter holts and/or other signs of any protected species are recorded, licencing and reasonable avoidance of harm measures will need to be considered for badger and otter in addition to great crested newt. During any of the proposed mitigation work including otter/Great crested newt (GCN) fence installation, a reasonable avoidance method statement must be followed for species such as reptile, GCN and nesting birds. **See Appendix A.**

3.0 ASSESSMENT OF IMPACTS

3.1 Evaluation of Impacts Without Mitigation

According to NE updated Otter guidelines 5 April 2019, it is widely accepted that the otter is territorial and have large home ranges of up to 35km for males along rivers depending on the quality of the habitat and availability of food.

The predicted impacts of the development on otters is assessed below on the basis of providing no avoidance or mitigation measures.

1. Moderate - Major disturbance of habitats within 15m of the river corridor. Noise and lighting could have the potential to cause disturbance.
2. Minor interference with but not obstruction of routes within their range. The excavation of trenches for underground pipework installation could interfere and cause disturbance with usual regularly frequented routes.
3. Minor - Moderate disturbance to resting and feeding places. Habitat that may support resting otter could be temporarily lost to excavation and trenching of pipework. Vehicle movements and machinery could cause disturbance.
4. Minor – Moderate sediment deposits within the river could change water quality and affect food availability. Runoff from open excavations and bare soil could enter the river. A pollution incident in the river could occur.

4.0 AVOIDANCE, MITIGATION & COMPENSATION MEASURES

4.1 Overall Strategy

In order to reduce or negate the potential impacts, a number of avoidance, mitigation and compensation methods have been devised.

4.2 Avoidance

A **mitigation method statement** to include all protected species outlined in **Appendix A** will be followed.

- No work on or near the river and known otter habitat (within 5m) will be carried out. A buffer zone of 5m along the river will be maintained where no work shall occur.
- No work will occur at night in order to reduce impacts to otter and other nocturnal species.
- No artificial lighting will be used within 30m of the river corridor.
- A tool-box talk to all contractors will be given by an ecologist in relation to the potential for otters to be present and the legislation governing their protection.
- A pollution control ecological protection method statement will be adhered to.
- A survey for signs of otter will be carried out prior to any construction work.

4.3 Mitigation

Mitigation measures are deemed necessary to reduce the impacts where potential negative effects cannot be avoided.

- As a precaution, an otter-proof fence will be erected around the section of pipeline trench within 30m of the river corridor to deter and prevent otters from entering the pipeline installation trenches development area. **Refer to Figure 1 for proposed location of otter fence Five Fords Glasshouses Indicative Proposed Otter Fence Layout (and Fence Specification) SC/FFG/009 5th September 2020.** The otter fenced area will also be GCN exclusion fenced subject to EPS licencing. A separate strategy has been designed in relation to GCN protection.
- The erection of otter proof fence is not considered necessary in other development areas.
- Excavations that are a greater distance than 30m from the river corridor (and not otter fenced) will be furnished with an appropriately sized escape route for any animals that enter such as a ramp.
- An Ecological Clerk of Works will be appointed to oversee the mitigation will inspect the site regularly for signs of otter and use of any escape routes and integrity of the otter proof fence. A log of checks will be maintained.

- Should otter signs or features be identified within 30m of proposed development or within or on the periphery of existing working/development areas, operations will cease and advice will be sought from NRW.
- Water containing sediment and runoff will be prevented from attenuating or being discharged in an uncontrolled manner. However, if it accumulates it will be contained and prevented from discharging into the river. The use of bunded fuel areas to prevent pollution along with sand bags and straw bales to filter sediment from bare soils will reduce the potential for incidents. Areas of bare soil will be kept to a minimum. No water will be directly discharged to the river. Soil stockpiles and excavations will be kept to a minimum. **See Appendix B for pollution control measures.**

4.4 Compensation

Compensation measures include:

- Reinstatement of the habitats within temporary disturbance areas of trench excavation and pipeline installation.
- Creation of improved habitats with increased structural and species diversity such as wildflower grassland, woodland, scrub and ponds in place of arable crops within the vicinity of the river corridor and adjacent to the existing 'Sesswick Way Road Mitigation Area'.

5.0 DISCUSSION & SUMMARY

5.1 Licence Requirements

A licence is not deemed to be required. This decision has been reached because:

Harm and/or disturbance to otters can be avoided;

Damaging or blocking access to their habitats can be avoided.

5.2 Summary

The work will not result in a net loss of breeding or resting sites.

Sufficient stretches of unaffected river corridor are likely to sustain the otter population.

The work will provide an increased area of enhanced long term sustainably managed habitat than that which will be temporarily disturbed and restored.

The avoidance, mitigation and compensation measures proposed are designed to afford protection of the otter population and appropriate habitat at and adjacent to the site.

References

<https://www.gov.uk/guidance/otters-protection-surveys-and-licences> NE Published 6 October 2014

Last updated 5 April 2019

Wales Mammal Biodiversity Action Forum Mammal Action Plans Otter *Lutra lutra* October 2013

The Wildlife and Countryside Act 1981 (as amended)

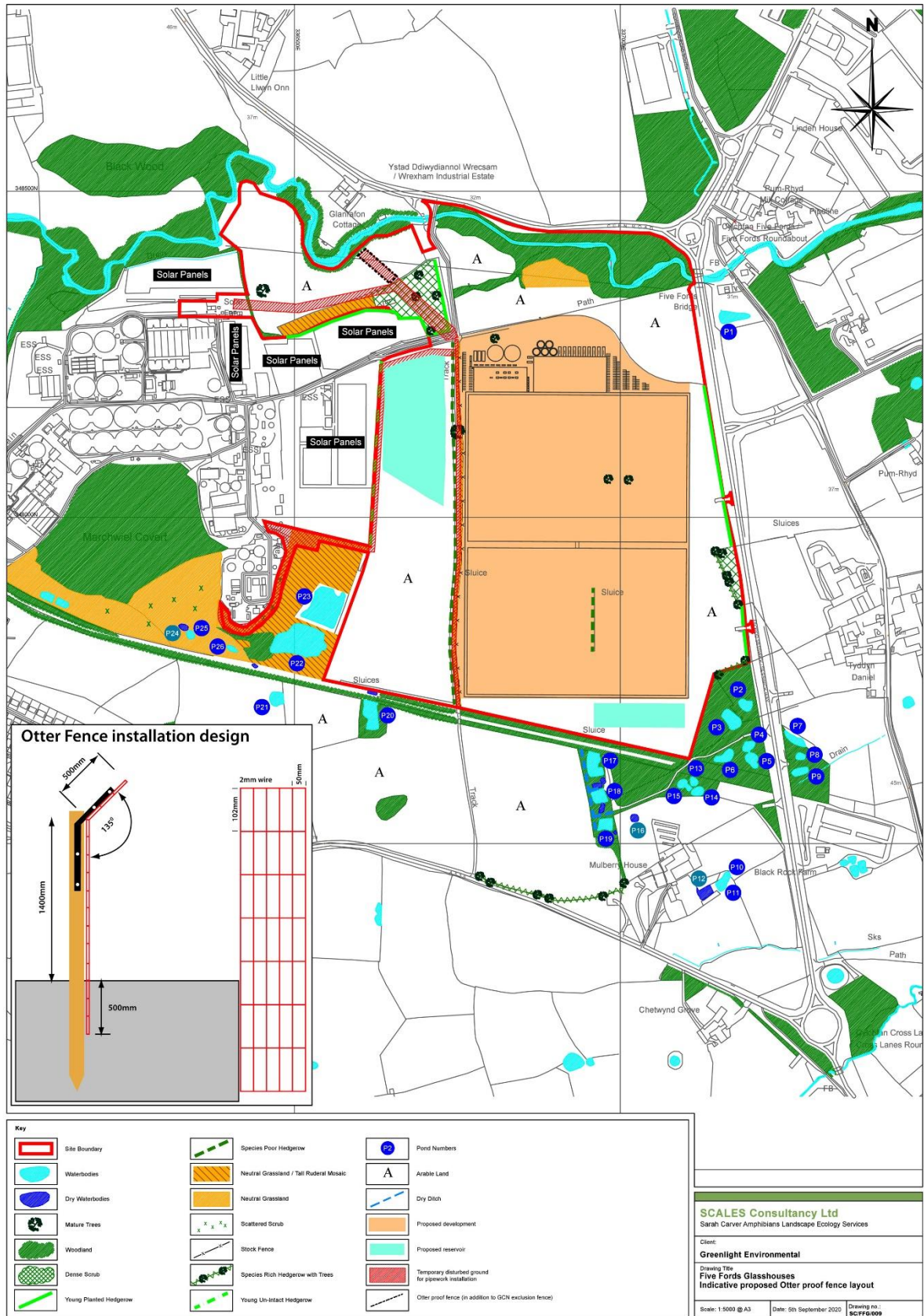
The Countryside and Rights of Way Act 2000

The Conservation of Habitats and Species Regulations 2017

The Natural Environment and Rural Communities Act 2006

The New Rivers and Wildlife Handbook, RSPB, The NRA, The Wildlife Trusts 1994

DRAWING – Five Fords Glasshouses Indicative Proposed Otter Fence Layout (and Fence Specification) SC/FFG/009 5th September 2020



APPENDIX A – AMPHIBIAN, REPTILE AND NESTING BIRD MITIGATION METHOD STATEMENT

Purpose

As a precautionary approach it is considered that a reasonable avoidance measures scheme should be followed to ensure that there would be no impact on potential reptiles, great crested newt or nesting birds using the site during Otter/GCN fence installation. The procedures will be followed to significantly reduce the risk of causing an offence under current statutory legislation.

The statement as described below broadly follows the approach of checking and reducing available amphibian, reptile and nesting bird habitat thus minimising the likelihood of their presence during otter/GCN fence installation and in addition an ecologist searching habitats by hand and visually examining all areas prior to this work.

Reasonable Avoidance Measures Procedures for Otter/GCN fence installation

1. An ecologist will be retained during the project to provide advice and recommendations.
2. Prior to the commencement of any works, staff and contractors will be informed of the potential presence of reptiles and the associated legislation. Staff will be informed that they will need to cease work immediately and consult the appointed Ecologist in the event that the presence of an amphibian, reptile, nesting bird or any other significant wildlife in the operational area is suspected.
3. A tool box talk will be provided to convey relevant wildlife legislation and appropriate protective measures that need to be employed by operational and construction staff.
4. A preliminary search for the presence of amphibians, reptiles, badger setts and nesting bird activity will be undertaken by an ecologist prior to the access of any plant or machinery. The proposed route of access and fencing routes will be examined for features which have the potential to support reptiles – rubble, debris, log piles, wood brash piles, tussocky grassland, tree stumps and any refugia sites for example. All such features will be closely searched by hand prior to the access of machinery and plant. The ecologist will be present to undertake hand searches and supervision on each day that work is undertaken. Any refugia such as bricks or wood for example will be lifted, examined and removed from working areas.
5. All vegetation within working areas/fence routes will be cut so as to render it less desirable for great crested newts and reptiles to avoid harm during fence installation.
6. Prior to the commencement of vegetation cutting and GCN/otter fence installation, the location of the proposed GCN/otter fence installation work will be searched by hand for the presence of amphibians, reptiles and the site will be checked for nesting birds.
7. In the event that excavations are to be left exposed overnight or for a long period of time then a stick/ramp or plank (whichever is appropriate) will be placed in the excavation to aid the escape of any animal falling in and becoming trapped.
8. The above measures will be undertaken immediately prior to commencement of any works and any required mowing 1 weeks prior to the commencement of the works – this will

minimise the opportunity of fauna entering the area in the time of initial survey and inspection and the clearance/construction operations.

9. The Ecologist will be present at the commencement of the works and must be contacted in the event of any potential wildlife issues.
10. Common species of amphibian and reptile will be moved to safe havens on site unaffected by development activities.
11. Construction staff will remain in contact with the ecologist throughout the works.
12. In the event that a protected species is discovered at the site, works will cease and the ecologist will provide advice and recommendations in accordance with the appropriate statutory wildlife legislation.
13. Relevant authority approvals, permissions and protected species licences will be sought if necessary.

APPENDIX B ECOLOGICAL PROTECTION STATEMENT

The aim of the scheme outlined in this document is to set out measures to protect habitats within the surrounding environment during the construction phase of the development and reduce the risk of pollution.

Section 11 of the NPPF sets out the overall policy in relation to 'Conserving and Enhancing the Natural Environment' with paragraph number 109 stating that 'The planning system should contribute to and enhance the natural and local environment by:.... 'Minimising impacts on biodiversity'... and 'preventing both new and existing development by contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability'.

Paragraph number 122 also states that local planning authorities should assume that pollution control regimes will operate effectively. During the operational phase of the facility, Natural Resources Wales permitting and controls will apply.

Main Potential Sources of Pollution

The main potential pollutants during construction include dust, silt and drainage run-off.

- 1) Should any significant areas of ponding water develop, straw bales or alternatively sand bags will be placed around the boundary of the water so as to largely contain it and filter out any suspended solids. They will be placed in a continuous line in such a manner as to prevent water containing silts and sediments from discharging in an uncontrolled manner off site.
- 2) The straw bales or sand bags will be inspected and maintained in place as necessary throughout the construction period and will be replaced as necessary to ensure their effectiveness.
- 3) Care will be taken on site to minimise the steepness of any exposed bare ground or stockpiles which would be vulnerable to rainfall thereby reducing the risk of soil erosion and release of suspended sediments into standing surface water or the river. If significant stockpiles of material are created, they will be seeded to stabilise the soils.
- 4) Should the ground become dry and dusty, dust suppressant measures will be employed. Dust will be controlled by periodic bowsering of the site with clean water as necessary with the use of a tractor and bowser.
- 5) Chemicals including fuel and oil will be stored on site in a location with an impervious base within a bund and will be secured. The bund will be of adequate capacity to contain any spillages or leaks. Leaking drums or tanks will be prohibited from site and if any should be detected they will be removed immediately in accordance with a safe procedure. Please note there are no requirements for any fuels or oils on site at any time.
- 6) Valves to any tanks will be protected from vandalism and kept secure to prevent unauthorised access. They will be kept turned off and kept in a locked state when not in use and.
- 7) There is no requirement for onsite refuelling but if it is necessary, refuelling of plant will be undertaken in a designated area away from sensitive habitats and will be supervised and not

left unattended. Spill kits will be available on site. Hoses and valves will be maintained in a safe condition. Diesel pumps will be placed on drip trays to ensure that minor leaks and spillages are controlled. Any such accumulated liquids would be removed and appropriately disposed of.

- 8) In the event of a significant spillage or an emergency, the spill kit will be used and the area temporarily banded immediately to avoid uncontrolled discharge. Any spilt substance would be contained by covering with absorbent materials such as soil or sand or a boom. Natural Resources Wales would be contacted in the case of such an Emergency and the appropriate advice sought and required procedures as instructed would be followed.