



Biosecurity Risk Analysis and Measures

Land at Llay Hall Farm,
West of Miners Park,
Llay,
Wrexham LL12 0PD

Prepared on behalf of
Biogas Technology Ltd

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QUALITY MANAGEMENT

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Prepared by:	Dr David Hackett , BSc (Hons) MLD PhD MCIEEM CEnv, Director	Signature:	
Proofed by:	Amy Stanley BSc (Hons), PGD, AIEEM, Senior Ecologist	Signature:	

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1.0 SUMMARY

- 1.1 Biora Ltd was commissioned in August 2021 by Biogas Technology Ltd to produce a biosecurity risk assessment in satisfaction of Condition 5 of LLA P/2019/0210, for the '*erection of two generator units and ancillary development*', subsequently amended as LLA P/2021/0915
- 1.2 The conditions states '*No part of the development shall commence until a biosecurity risk assessment has been submitted to and approved in writing by the Local Planning Authority*'.
- 1.3 The proposed development comprises development of a two gas-powered generator units and ancillary development on land at Llay Hall Farm, west of Miners Park, Llay, Wrexham LL12 0PD.
- 1.4 For further information on this document, please contact:

Dr David Hackett

Biora Ltd

m: 07973721732

e: d.hackett@bioragroup.com

2.0 INTRODUCTION

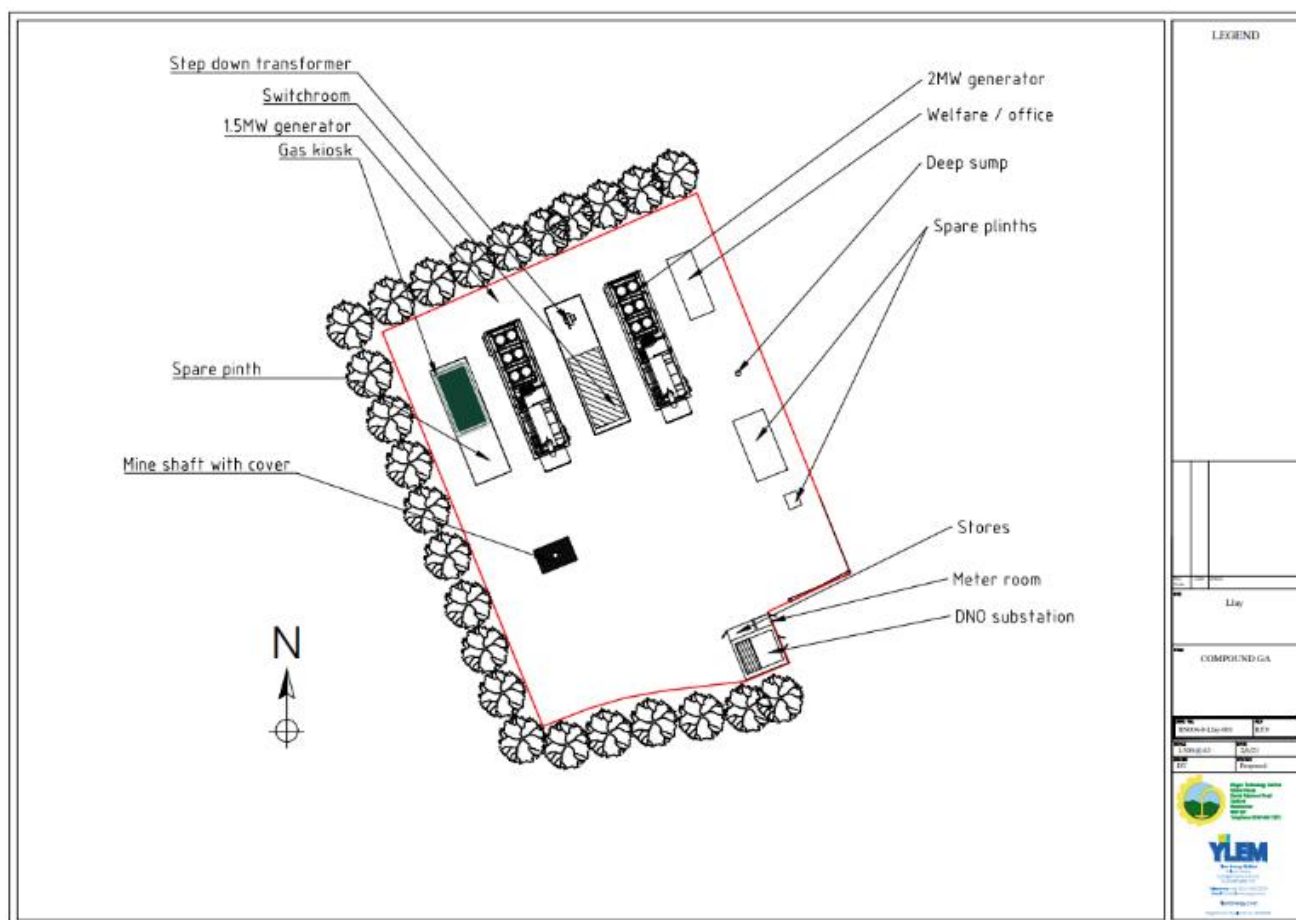
2.1 Background and Scope of Work

- 2.1.1 Biora Ltd was commissioned in August 2021 by Biogas Technology Ltd to produce a biosecurity risk assessment in satisfaction of Condition 5 of LLA P/2019/0210, for the 'erection of two generator units and ancillary development', subsequently amended as LLA P/2021/0915
- 2.1.2 The conditions states 'No part of the development shall commence until a biosecurity risk assessment has been submitted to and approved in writing by the Local Planning Authority'.
- 2.1.3 The site comprises a small area of hard standing compound and associated access track off Llay Road (B5102), immediately to the west of Llay Industrial Estate
- 2.1.4 The following document addresses the biosecurity risk analysis and biosecurity measures required to construct and operate this site where risk has been identified, including:
- Appropriate measures to control any invasive non-native species on site; and
 - Measures or actions that aim to prevent invasive non-native species being introduced to the site for the duration of construction and operational phases of the scheme.
- 2.1.5 The land at Llay Hall Farm, west of Miners Park, Llay, Wrexham LL12 0PD, which is the subject of this planning condition is henceforward referred to as 'the site' in the following.

2.2 Proposed Development Works

- 2.2.1 The proposed development application at the site is for the installation of two gas-powered generators and ancillary elements **Plan 1**, below.

Plan 1. Proposed Development (not to scale)



2.3 Site Description and Context

- 2.3.1 The site is centred at OS grid reference **SJ 31986 56240** and located to the west of Llay industrial estate in an – otherwise - rural setting. The rural landscape comprises hedge-lined fields with occasional trees and ponds scattered through the fields.

3.0 RISK ASSESSMENT

3.1 Non-Native Species (NNS)

3.1.1 Non-Native Species (NNS) are any animal or plant introduced (deliberately or accidentally) by human activity to an area in which they do not 'naturally' occur.

3.1.2 Some animals and plants may have been transported to the UK a long time ago and be considered 'naturalised', but these are still considered non-native species. Others are native to some parts of the UK but not to other parts (for example native to the mainland but not all islands).

3.1.3 Invasive Non-Native Species (INNS), sometimes referred to as 'invasive alien species', are those non-native species that have the ability to spread rapidly and become dominant in an area or ecosystem, causing adverse ecological, environmental and economic impacts. Examples of the negative effects caused by invasive non-native species include: economic cost, structural damage, environmental degradation, aesthetic degradation, biodiversity loss, loss of land function, access restrictions and increased risk to human and animal health and safety. Costs incurred because of invasive non-native species can include repairs to damaged structures and environment, delays to works, loss in value of a landholding or other asset, potential for prosecution because of damage caused by invasive species or infringement of legislation.

3.2 Legislation and Responsible Authorities

3.2.1 In Wales the main legislation relating to the control of non-native species is the Wildlife Act 1981. Section 23 of the Infrastructure Act 2015 amended the Wildlife and Countryside Act by inserting a new Schedule 9A to introduce a statutory regime of species control agreements and orders to ensure that, in appropriate circumstances, landowners take action on invasive non-native species and formerly-resident native species, or permit others to enter the land and carry out those operations, to prevent their establishment and spread. The environmental authorities with the powers to make species control agreements or orders in Wales are the Welsh Ministers and Natural Resources Wales.

3.2.2 The body with primary responsibilities for non-native species issues in Wales is Natural Resources Wales

3.2.3 The [Code of Practice for Species Control Provisions in Wales](#) (May 2017) sets out how the provisions for species control agreements and orders contained in the Wildlife and Countryside Act 1981 should be applied by the Welsh Ministers and Natural Resources Wales. The Annex of this report also sets out which are 'native' species, formerly resident native species, plants – non-native species. To protect plant health, a Plant Health Order can be used to enforce controls and restrictions on the import, movement and keeping of certain plants, plant pests and other materials. The Plant Health Order totally prohibits the import of some genera and of certain types of material from particular species. The Order also imposes special restrictions, including movement conditions, on a number of crop or forestry species, to protect the UK agricultural, forestry and horticultural industries from particular non-indigenous pests and diseases.

3.2.4 Where undertaking control of any non-native plants on the land own or occupied, the following legal responsibilities must be complied with:

- Spraying herbicides
- Burning invasive plants
- Burial of soil containing invasive plant material
- Disposing of invasive plants and contaminated soil off site

3.2.5 Full details are available on the Netregs website www.netregs.org.uk

3.3 Site Risk Analysis

3.3.1 There are nearly 2,000 non-native species established in Great Britain, approximately 300 of which are known to have adverse impacts, and more will arrive and have an impact¹.

3.3.2 As resources are not unlimited, a proportionate approach has to be taken in relation to the risks, the likely impacts and the effort spent to control the risks. [Table 1](#) sets out the Biosecurity Risk Assessment for Site Construction and Operation.

¹ The Great Britain Invasive Non-native Species Strategy (2015)

Table 1. Biosecurity Risk Assessment for Site Construction and Operation

Operation	Nature of Risk	Level of Risk	Recommendation
Site preparation and clearance	Machinery tracking vegetative fragments and seeds	Low – work will be largely carried out over existing hard standing	Ensure that all machinery has been decontaminated before use on site. Footwear should also be decontaminated on arrival and departure. No topsoil is present on site, so there is no likelihood that contaminated material could be removed from site.
Construction	Importation of soils and other materials	Low – no importation of soils required.	Materials should be checked prior to purchase that they are suitable.

4.0 BIOSECURITY MEASURES

4.1 Identification

4.1.1 When dealing with any non-native species where significant risk has been identified, demonstrating that due diligence is exercised, adopting best practice and taking reasonable steps to comply with the legislation is prudent. This involves:

- Adopting a precautionary approach.
- Carry out a risk assessment
- Identification of non-native species, mitigation advice and following good management practices. Photographs of many INNS species, advice on mitigation methods and 'good practice' guidance for many key species can be found at the GB Non-Native Species Secretariat website: www.nonnativespecies.org. Early advice should be sought from an expert or habitat lead, where there is uncertainty about any issues relating to either the identification/management or release/planting of any non-native plant or animal

4.2 Avoiding the introduction, movement and spread of non-native species on and off site

4.2.1 Pre-construction considerations:

- Ensure detailed checks and risk assessments are carried out for non-native species within initial site feasibility assessments and surveys.
- Where any non-native species is present, ensure the risks and implications of managing it are understood, as well as the legal requirements. Seek advice early.
- Where a non-native species is identified as a risk of being introduced, spread within, or moved off site, ensure mitigation measures are considered at the early planning stage, and ensure enough time is given to implement them.
- Consider phasing the development to allow time to deal with the presence and/or risk of spread of non-native species.
- Ensure non-native species and locations (mapped) are incorporated within all relevant site method statements, including the site [Ecological Protection Plan](#) and [Species Protection Plans](#), where appropriate.
- Where a species requires long-term management (e.g., Japanese knotweed *Fallopia japonica*), ensure a [Site Management Plan](#) is put together that addresses all issues associated with it.
- Nominate a designated Clerk of Works to manage the issue of non-native species on the site from an early stage

4.2.2 Biosecurity consideration on-site:

- Where the site does not have any non-native species, it is also important to consider potential pathways of introductions onto the site from elsewhere and for mitigation procedures to be put in place to prevent this
- All contractors should be fully briefed, and ensure all staff are aware of what the species looks like www.nonnativespecies.org and the issues associated with it. This could be done through 'toolbox' talks or within site introductions. Everybody working on site must understand the role and authority of the Ecological Clerk of works managing the issue of the non-native species.
- Any areas that are contaminated/infested with non-native species should be recorded within the [Site Management Plan](#). They should be isolated with fencing and restricted access signs put up.

4.2.3 Equipment / machinery

To maintain good site hygiene when dealing with non-native species:

- A fence that can be clearly seen should mark out the area of issue. Signs should be erected to warn people working there that the area is infested / contaminated.
- Where contaminated soil, materials or water are located, signage should be erected to indicate them.
- Personnel working on or between sites should ensure their clothing and footwear are cleaned where appropriate to prevent spread
- Tracked vehicles should not be used within the area of infestation.
- All vehicles leaving the infested area and / or transporting infested soil/materials must be thoroughly pressure-washed in a designated wash-down area before being used for other work.
- Where cross-contamination is possible (i.e., from one site to another), consider designating vehicles or machinery to specific sites where possible to prevent spread.
- Material / water left after vehicles have been pressure-washed must be contained, collected and disposed of appropriately.
- All chemicals used for the control of non-native species should be stored and used in a responsible manner.

- All wash facilities including wastewater from washing vehicles, equipment or personnel should be managed in a responsible way so as not to not cause harm to the environment².

4.2.4 Use and movement of soil and water

The introduction of non-native species both onto and off a site is most likely to happen in the following ways:

- **Contaminated topsoil.** If soil has been treated for and is free from Japanese knotweed, it can be re-used on site without the need for a waste management license or an exemption. If taken off site, this material must be disposed of in a licensed landfill. Treated soils are used at risk and they should be re-used in a restricted area, rather than spread across the site, but this should be recorded in an ongoing **Site Management Plan** and inspected/treated accordingly. The source of topsoil brought onto any site should always be considered as soils can easily introduce a non-native species, particularly Japanese knotweed. Section N.6.4.5 of BS 3882:1994, the British Standard for topsoil clearly states that it is critical that material should be free from Japanese knotweed propagules, rhizome and vegetative fragments.
- **Use of water and/or crossing water.** If using water on the site for construction purposes or to wash vehicles or equipment, it should be ensured that the source of that water will not inadvertently act as a vector for the transportation of non-native species to/from the site or elsewhere. If surface or ground water is stored or abstracted on the site, appropriate authorisation must be gained from Natural Resources Wales. Disposal of contaminated wash water, including all silt and other solids (e.g. plant fragments), must also be dealt with in a responsible manner to avoid pollution and to prevent the spread of any non-native species that may be present. For further information see www.netregs.org.uk (**Pollution Prevention Guidance 5 - Works and Maintenance in or Near Water**, and **Invasive Plants** pages), and/or seek advice from Natural Resources Wales.
- **Contamination of vehicles or machinery.** Where non-native species are known to be within or close to the site, care should be taken not to facilitate the transportation of plant seeds or fragments, animals or eggs on machinery, vehicles or by foot, from one site/river catchment to another. This may require the need for an exclusion zone and/or the use of designated machinery/ equipment on key sites to prevent movement from one site or river catchment to another. Vehicles should be inspected before moving them from site to site or off site, and suitable wash facilities provided for the machinery, if needed, e.g., a drive through bath or footbaths. Particular attention should be paid to caterpillar tracks and where trucks and dumpers are stowed.

² See www.netregs.org.uk for further information.

FURTHER GUIDANCE

The Great Britain Invasive Non-native Species Strategy (2015) www.gov.uk/government/publications

Net Regs www.netregs.org.uk

CIRIA Manual C679 '*Invasive species management for infrastructure managers and the construction industry*'

Wildlife and Countryside Act 1981

The Knotweed Code of Practice – managing Japanese Knotweed on development sites (EA) (Environment Agency document - England & Wales only)

The Non-native Species Secretariat (NNSS) *The Economic Cost of Invasive Non-Native Species on Great Britain 2010*

GLOSSARY OF KEY TERMS

Alert mechanism – a system used for rapid notification of specified invasive non-native species.

Biocontrol - the use of a natural enemy or predator to control an invasive non-native species.

Citizen science – the collection and analysis of data by members of the general public, typically as part of a collaborative project with professional scientists.

Contingency plan – a high level plan to respond to a future threat posed by an invasive non-native species.

Horizon scanning – a systematic process used to identify future threats from invasive non-native species not already established in Britain.

Hotspot analysis – a systematic approach to identifying areas at greatest risk of invasive non-native species impact or introduction.

Invasive Species Action Plan – a high level plan setting out the broad policy aim and management actions for a particular invasive non-native species.

Monitoring – a series of observations over time (often relating to species distributions) usually used to measure trends.

Pathway – a broad term used to describe the way in which an invasive non-native species is introduced or spread (encompasses, for example, the purpose, route and mode of introduction).

Pathway Action Plan – a high level plan setting out the broad policy aim and actions designed to reduce the risk posed by a particular pathway.

Rapid response – the instigation of action against an invasive non-native species threat at a stage when a locally, regionally or nationally important strategic win might still be achievable.

Risk analysis – the overall process that provides decision makers with evidence to help determine priorities for invasive non-native species management (comprises: hazard identification, risk assessment, risk management and risk communication).

Risk assessment – part of risk analysis, systematically assesses the risk posed by a non-native species (does not take into account benefits of non-native species or potential management responses).

Risk management – part of risk analysis, systematically assesses the options available for managing invasive non-native species including cost/benefit analysis.

Surveillance – close observation, usually to detect a particular change or event such as the arrival of a new invasive non-native species