Title	**Proposed Development at CCP Building Products Ltd, Llay Road, Llay, Wrexham – Biosecurity Risk Assessment and Method Statement**
Client	**Material Evolution Ltd**
Date of Risk Assessment	**19th June 2024**
Author	**Tom Knight**

1 Introduction

Background

1.1 Marches Ecology was commissioned by Material Evolution Ltd to produce a Biosecurity Risk Assessment and Method Statement (BRAMS) for a proposed development at the existing CCP Building Products site at Llay Road, Llay, Wrexham (Approximate OS Grid Ref. SJ 3265 5613).

1.2 A BRAMS identifies and assesses the risk posed due to the accidental spread of invasive non-native species (INNS) or diseases and proposes suitable control measures. The salient points will be included in any toolbox talk or site induction provided to site contractors. The delivery of a toolbox talk would ensure site awareness and identify individual responsibility.

1.3 The structure of the Risk Assessment has been adapted from that provided by the GB Non-Native Species Secretariat (NNSS)[1]. This Risk Assessment was completed by Tom Knight of Marches Ecology on 19th June 2024.

The Development

1.4 The proposed development is to install a new manufacturing plant at the existing CCP site. This would mainly include a mixer and dosing system with two small silos contained within the existing building and three new larger silos outside the same building.

1.5 The proposed work site (outside the existing building) is entirely characterised by existing hard-standing (see photo below).



[1] https://www.nonnativespecies.org/assets/Document-repository/Biosecurity_Risk_Assessment_FINAL_1.pdf

2 Need for Biosecurity Measures

Introduction

2.1 '*Section 14(1)* of the *Wildlife and Countryside Act 1981* (as amended) makes it illegal to release or allow to escape into the wild any animal which is not ordinarily resident in Great Britain and is not a regular visitor to Great Britain in a wild state, or is listed in *Schedule 9* to the Act. It is also illegal to plant or otherwise cause to grow in the wild any plant listed in *Schedule 9* to the Act. The *Schedule 9* list of animal and plant species has been amended by the *Wildlife and Countryside Act 1981 (Variation of Schedule 9)(England and Wales) Order 2010*'[2]. *Section 14 (1)* covers spreading the species or transferring polluted ground material from one area to another.

2.2 The *Invasive Alien Species (Enforcement and Permitting) Order 2019*[3] relates to the prevention and management of the introduction and spread of non-native species and the associated licensing/ permitting system.

2.3 The GB NNSS states that *'Biosecurity means taking steps to make sure that good hygiene practices are in place to reduce and minimise the risk of spreading invasive non-native species. A good biosecurity routine is always essential, even if invasive non-native species are not always apparent*'. Prevention of the spread of parasites and diseases could also be added to this statement.

2.4 It is not always possible to see INNS/ diseases and they can be transmitted accidentally by people moving between sites. They are most often transported in soil or organic material, such as plant debris, that can be carried on footwear, equipment or by the wheels of vehicles and machinery. Some pathogens are dispersed in water and so the risk of these being spread increases when conditions are wet.

Known Status of INNS at the Site

2.5 The chytrid fungus has been recorded from Talacre and Johnstown in 2008. This fungus affects amphibians.

2.6 Four INNS – Two species of Cotoneaster, Montbretia and Knotweed - listed on *Schedule 9* of the *Wildlife and Countryside Act 1981* were recorded from the wider CCP site. No such plants have been recorded from the actual proposed work site. Based on Cofnod records, a number of *Schedule 9* plants have been recorded from the area surrounding the CCP site including *Elodea canadensis* (Canadian Waterweed), *Elodea nuttallii* (Nutall's Waterweed), *Cotoneaster integrifolius* (Entire-leaved Cotoneaster), *Cotoneaster simonsii* (Himalayan Cotoneaster), *Myriophyllum aquaticum* (Parrot's-feather), *Impatiens glandulifera* (Himalayan Balsam), *Fallopia japonica* (Japanese Knotweed), *Rosa rugosa* (Japanese Rose), *Crocosmia ×crocosmiiflora* (Montbretia), *Rhododendron ponticum* (Rhododendron) and *Lamiastrum galeobdolon* subsp. *argentatum* (Variegated Yellow Archangel).

2.7 Marches Ecology (2024)[4] concludes that '*The proposed development would be undertaken in an existing area of hard-standing which is more-or-less unvegetated. Basic biosecurity measures are unlikely to be required in this instance*.' However, a consultation response

[2] http://www.nonnativespecies.org/index.cfm?pageid=67

[3] HMSO (2019). *The Invasive Alien Species (Enforcement and Permitting) Order 2019*. HMSO, London.

[4] Marches Ecology (2024). *Proposed Development at CCP Building Products Ltd, Llay Road, Llay, Wrexham – Preliminary Ecological Appraisal*. Produced on behalf of Material Evolution Ltd.

provided by Natural Resources Wales (Ref. CAS-253211-Z3R5) clarified their position that a Biosecurity Risk Assessment is required. This document has therefore been produced and adopts a precautionary approach.

Vulnerable Species/ Habitats

2.8 The most likely vector for the spread of non-native plants to the site during the proposed works is via contaminated soil on footwear, equipment and or vehicles/ machinery. It is considered that vegetated parts of the site are vulnerable to the spread of these non-native invasive plants. As the work site consists of hard-standing it does not represent a vulnerable habitat.

2.9 Ash dieback is caused by a fungus that is generally spread via wind-blown spores. It can also be spread via the movement of diseased Ash plants and logs/ wood from infected trees though this is currently considered to be a low risk. Spores could also be transported on clothes, footwear and equipment/ vehicles. Ash dieback is found throughout the Wrexham area.

2.10 As Great Crested Newts and other amphibians may be present on or near the site it will be important not to transfer amphibian diseases on/ off-site.

Other INNS that could be Brought to Site

2.11 It is possible that other INNS, besides those listed above, could be inadvertently transported to the site. However, further to the Risk Assessment conducted below it is considered that the proposed general control measures should be sufficient in this instance with respect to other INNS that could potentially be transported to the site. The clean-check-dry protocol should largely be sufficient for the control of relevant amphibian diseases.

Amphibian Diseases

2.12 A number of amphibian diseases have caused concern in recent years, in particular the chytrid infection and ranavirus (ARG UK Advice Note 4[5]). Spread of these diseases is largely associated with the handling of amphibians or activity at waterbodies. However, it is also possible that spores may be transported on to/ from a site on contaminated footwear, equipment and vehicles/ machinery.

2.13 There is the potential for diseases to be transferred to amphibians that may use the habitat near the site. Personnel associated with the proposed works and associated machinery/ equipment that will be used on site have the potential to transfer amphibian diseases on/ off-site. At present the biosecurity risk posed by the proposed works to local amphibian populations due to the potential for the spread of diseases is considered to be negligible. The proposed works do not require any access to any waterbodies. The general control measures detailed below are considered appropriate to address this level of risk.

[5] ARG UK (2017). *Amphibian and Reptile Groups of the UK – Advice Note 4: Amphibian Disease Precautions: A Guide for UK Fieldworkers*. Version 2, revised March 2017. Available at: https://www.arguk.org/info-advice/advice-notes/324-advice-note-4-amphibian-disease-precautions-a-guide-for-uk-fieldworkers-pdf-2

3 Biosecurity Risk Assessment

Activities that may Cause Spread

3.1 No *Schedule 9* plants have been identified within the work site or immediate area.

3.2 Invasive non-native plants and/ or plant or animal diseases could potentially be brought on to the development site via materials/ equipment *etc*. being used for the proposed works, and or contaminated footwear or equipment transferring diseases between the development site and other sites.

3.3 Existing parasites/ diseases could be transferred off site. Potential pathways for INNS/ diseases being brought onto the site include the transfer of soil on machinery and human vectors, and subsequent site works (such as the movement of excavated material around the site or off-site). Measures must therefore be implemented to prevent other INNS plant species (and/ or parasites/ diseases) being brought on to the development site and/ or transferred off site.

3.4 Hand searches for amphibians will be conducted as part of the Reasonable Avoidance Measures (RAMs). Any handling of animals risks the introduction/ spread of parasites/ diseases.

Activity Risk Assessment

3.5 *Table A* on the following page presents the Activity Risk Assessment. For each activity the severity of impact (S), should the INNS be spread is assessed on a numerical (1-5) scale. Category 5 is the highest impact. The likelihood of spread (L) is similarly assessed on a numerical (1-5) scale. Category 5 is 'very likely' that the INNS would be spread.

3.6 The overall risk (R) for that activity is calculated by multiplying S × L. The NNSS document provides a matrix that identifies three levels of risk rating - green-amber-red. A score of four or less (green) is usually considered acceptable. A score of 4-12 is amber; above 12 is red and is considered unacceptable.

3.7 Following this initial assessment control measures that should be undertaken to reduce the likelihood of INNS being spread are identified/ described. A rating of low-high (1-5) is subsequently assigned for the residual likelihood (Rl) of INNS being spread after the control measures are implemented. The residual risk (Rr) is recalculated by multiplying S × Rl. The residual risk scale is as follows:

- **0-4 - Risk likely to be acceptable**.
- **4-12 - Consider further options for reducing risk; if not available consider proceeding with caution**.
- **12+ - Risk is too high; do not proceed until further consideration of control options has been taken into account**.

Table A - Activity Risk Assessment

Activity	Hazard Description	Risk Rating			Control Measures	Rr after Controls		
		S	L	R		S	RI	Rr
Amphibian RAMs	1). Handling amphibians. 2). Use of contaminated footwear/ clothing/ equipment and spread of diseases on to and off-site.	4	1	4	1). Follow ARG UK Advice Note 4. 2). Follow procedure for handling amphibians detailed below. 3). Wherever possible, avoid bringing vehicles/ machinery on to site. 4). Any equipment (*e.g.*, buckets for carrying amphibians) that may recently have been used on site(s) with INNS/ amphibian populations will be thoroughly cleaned using brushes/ a pressure-washer (at an appropriate location) and/ or subject to disinfection prior to being utilised on the site.	2	1	2
Site hard-works: moving materials, importation of materials, *e.g.*, hardcore.	1). Contamination of vehicles/ machinery and subsequent spread of INNS/ diseases to other sites. 2). Removal of contaminated materials - potential to spread INNS/ diseases within, and to other sites. 3). Importation of contaminated materials.	4	2	8	1). As 3). above. 2). All machinery/ equipment to be used on the site will be thoroughly cleaned using brushes/ a pressure-washer (at an appropriate location). All soil and other debris/ vegetation will be removed. 3). Maintain good machinery hygiene (including before accessing the site). Keep vehicles free from accumulated mud, pay particular attention to tyres/ wheel arches; tracks/ under-carriage. 4). All machinery utilised for the work will remain on-site for the duration of the work. On completion of the work the machinery will be thoroughly cleaned using brushes/ a pressure-washer. All soil and other debris will be removed from, in particular, the tracks, undercarriage and arm/ attachment. This will be undertaken at an appropriate location. Hand-tools/ other equipment should similarly be cleaned.	2	1	2
Moving vehicles/ machinery between sites.	1). Contamination of machinery (on tyres, tracks, buckets, *etc*) and subsequent spread of INNS/ diseases to this and other sites.	3	2	6	1). As above.	2	1	2

Construction workers moving between sites.	1). Contamination of footwear/ hand-tools and subsequent spread of INNS/ diseases to other sites.	3	2	6	1). As above. 2). Keep foot-wear/ hand-tools free from accumulated mud, pay particular attention to the treads on foot-wear. Thoroughly clean foot-wear/ hand-tools before entering site, and at the end of each day or leave on site.	2	1	2

4 Method Statement

Introduction

4.1 Biosecurity risks at the site include the potential for INNS/ diseases to be transferred on/ off and within site. As Great Crested Newts and other amphibians may be present on the site it will be important not to transfer amphibian diseases on/ off-site. Further to the appropriate implementation of the control measures this risk is likely to be deemed 'acceptable'.

4.2 The publication: Scottish Government (2010). *Biosecurity guidance for SEARS staff*. Revised October 2010; describes four levels of biosecurity control dependent on the perceived risk of the activity. The proposed works require Level 1 (Low Risk) biosecurity control as described in this guidance document and the general control measures detailed below are provided on this basis. The SEARS guidance is a useful source of general information on biosecurity.

4.3 Level 3 (Moderate Risk) biosecurity control measures are likely to be applicable should any amphibians be found during the implementation of the RAMs, necessitating handling of any animals.

4.4 This Method Statement will be issued to the Site Manager (or equivalent) and it will be discussed with all contractors/ sub-contractors as part of a tool-box talk. It will be made available on site at all times.

General Control Measures (Level 1)

4.5 To minimise the risk of spreading INNS/ diseases to/ from the site the Check-Clean-Dry[6] mantra advised as part of the Stop the Spread campaign by the NNSS should be adopted at all times:

1) **Check** your equipment including vehicles, clothing and boots and remove any plant or animal 'hitchhikers'.

2) **Clean** equipment including vehicles, clothing and boots thoroughly, remove all mud, leaves and plant debris. If it is not possible to clean on site, securely bag items and clean at a suitable location where risk of transfer of diseases is minimised. Wash vehicle tyres and wheel arches if muddy and park on hard-standing if possible.

3) **Dry** thoroughly any equipment or PPE that has been in freshwater or the marine environment; some INNS can live on damp items for weeks.

4.6 An appropriate location for the cleaning of machinery/ footwear will be identified prior to the start of any works at the site. These facilities will be maintained throughout the works. All machinery/ equipment will be thoroughly cleaned using brushes/ a pressure-washer (at an appropriate off-site, hard-standing, location) prior to being utilised on the site. All soil and other debris/ vegetation will be removed. As part of good machinery hygiene this approach should ideally be followed at all times.

4.7 The machinery utilised for the work will remain on-site for the duration of the work. On completion of the work the machinery/ footwear will be thoroughly cleaned using brushes/ a pressure-washer. All soil and other debris will be removed from, in particular, the tracks, undercarriage and arm/ attachment. This will be undertaken on hard-standing within the site

[6] https://www.nonnativespecies.org/what-can-i-do/check-clean-dry/

but well away from waterbodies/ drainage features. Hand-tools/ other equipment/ footwear should similarly be cleaned.

Control Measures for Amphibian Diseases (Level 3)

4.8 The ARG UK Advice Note 4 provides further information on precautions to be taken to minimise the risk of spreading amphibian diseases. This Advice Note is applicable to the implementation of the RAMs and should any amphibians be handled.

4.9 It is not currently anticipated that disinfection will be necessary. Should disinfection become necessary then the procedure provided in ARG-UK Advice Note 4 should be followed: Use a brush to scrub off any debris, plant fragments, mud etc. and rinse with water. Then disinfect using one of the following methods: 1) Soak/ wash in a bleach solution (diluted with water to produce a 4% solution) for 15 minutes; OR 2) Virkon (10 mg/ml, as per supplier's instructions) for 1 minute. Rinse with clean water and if possible, allow to dry.

4.10 Should any diseased amphibians be located or suspected, the RAMs scheme will be halted and Amphibian and Reptile Conservation (ARC) (https://www.arc-trust.org/)/ NRW contacted for further advice. Works will only re-commence when it is confirmed that it is safe/ acceptable to do so.

Handling Amphibians (Level 3)

4.11 The following is a brief summary of biosecurity measures to be implemented should any amphibians need to be handled. Further details are provided in the ARG UK Advice Note 4 which should be referred to for further information.

- Handle amphibians only when necessary.
- If handling amphibians, wear powder-free disposable vinyl gloves which you rinse before contact with the amphibians. Use vinyl rather than latex or nitrile because the latter two may be harmful to amphibians.
- Use a fresh pair of gloves for each site (pond/ waterbody) visited.
- Ensure that all workers wash their hands thoroughly with soap or hand sanitising gel and water after each day/ before moving to another site.
- Wash all clothing on a 40ºC cycle with biological detergent, after exposure to amphibians.
- Do not release amphibians anywhere except at the place of capture.

5 Signatories

This page should be signed by all those attending the tool-box that incorporates the Biosecurity Risk Assessment.

I have read and understand the requirements of this risk assessment.

Print	Signed	Company	Date