

Biosecurity Risk Assessment for Village Bakery

1.1 Introduction

During the consultation phase of the planning permission for the building of a new bakery, Natural Resources Wales (NRW) requested that a bio-security risk assessment be undertaken to minimise the risk of importing to the site invasive or non-native species.

This document tabulates those species that have been identified as having the potential to be imported during the construction phase of the project. The likely pathways and Operational mitigation have also been identified.

This document will be appended to the contractors Construction Method Statement for use on site.

Currently there are no known invasive species on site.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Himalayan balsam	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Himalayan Balsam is not known to be present on site. Low. There are no requirements to import soil.	Ensure contractors know what Himalayan Balsam looks like. If any plants are identified these should be pulled up and left to dry before the seeds set (July/ August).
Japanese knotweed	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Japanese knotweed is not known to be present on site. Low. There are no requirements to	Ensure contractors know what Japanese knotweed looks like. If it is identified on site, refer to the Environment Agency's Japanese knotweed Code of Practice.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
		import soil.	
Giant Hogweed	Seed being carried from site to site	Medium.	Ensure all boots, tools, tyres, plant and machinery are thoroughly cleaned before coming on site.
INN plants	Planting	Medium	All new planting stock be to grown in an environment free from INN plants.
<i>Chytrid</i>	Transport of spores on boots or field equipment from one water body to another. Machinery used to excavate new ponds as part of the mitigation package.	Low. No contact by personnel with other amphibian sites. High is machinery has been in contact with water on an infected site, otherwise low	Ensure all ecologists clean their footwear and survey equipment between sites. If amphibians are handled disposable vinyl gloves should be worn. During pond works ensure all machinery has been disinfected. Ensure the machinery is large enough so the machine doesn't have to enter the water.
<i>Crassula helmsii</i> – Stonecrop, Australian swamp	Spread of species on footwear or machinery.	Medium. <i>Crassula</i> is known to be present in north Wales but not found on site.	Ensure all ecologists clean their footwear between sites. Ensure contractors know what it looks like and all machinery is cleaned prior to arriving on site. If it is found on site it must be treated using glyphosphate.
<i>Other non native aquatic plant species</i> <i>Water fern, Parrot's feather, Floating Pennywort, Waterweed, least duckweed</i>	Spread of species on footwear of machinery	Medium	Ensure all ecologists clean their footwear between sites. Ensure contractors know what it looks like and all machinery is cleaned prior to arriving on site

Species	Potential contamination route	Likelihood of risk	Operational Procedure
<i>Phytophthora ramorum</i> – Sudden oak death	Via spores which can be dispersed by wind, rain and watercourses. Pathogen may be transmitted in debris e.g. leaves, needles, bark and soil on machinery. Introduction via new tree planting	Low. if no contact has been made with infected area Low	All equipment (machinery and footwear) thoroughly cleaned before entering site. All boots should be cleaned using the Propellor disinfectant. All stock to come from supplier free of infection.
<i>Chalara</i> Ash die back	Via spores but the main threat is introduction via imported nursery stock	Medium	No new ash to be planted as part of the planting scheme.
White nose syndrome	Fungus isolated from a bat in the UK in 2013 and 2014 but no cases in the UK. Contamination is through international bat workers	Low	Site specific equipment for handling bats

Disinfect boots and machinery that would be in contact with amphibians or pond water. Note that when making up bleach or Virkon solutions, pond water can be used so long as it contains little or no organic matter (as this reduces disinfectant effectiveness). Follow this procedure: • Use a brush to scrub off any debris, plant fragments, mud etc. • Rinse with water. Disinfect using one of the following methods:

Soak in a bleach solution (1 measure of household bleach to 9 measures water) for 15 minutes; OR • Virkon (10 mg/ml, as per suppliers instructions) for 1 minute; OR • Fabrics including those worn while doing amphibian fieldwork can be washed on a 40oC cycle (with detergent, ensuring sufficient rinsing). • Nets should be boiled for 10 minutes or if the fabric allows disinfected with spray bleach in a well ventilated area. • Rinse with clean water and if possible allow to dry for before next use. • Keep field gear (traps, net frames etc) inside plastic bags during transit and storage to reduce the chance of transmitting Chytridiomycosis. • Ideally all used disinfectant solutions should be poured directly into a sink/drain and flushed with clean water. In the field, pour onto an area of hard-standing, or similar un-vegetated area well away from the pond. Used gloves can be disposed of as domestic rubbish