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Address: Mc1, Road Five, Winsford Industrial Estate, Winsford, Cheshire, CW7 3RB

Clearfield Envirotech Limited
Mc1, Road Five, Winsford Industrial Estate, Winsford,
Cheshire, CW7 3RB



HABITATS RISK ASSESSMENT



13 September 2024

Our Reference: Clearfield-Winsford-RP07-Final, Rev A (Habitats RA)



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1 INTRODUCTION

1.1 BAKGROUND

- 1.1.1 This Habitats Risk Assessment has been prepared on behalf of Clearfield Envirotech Limited for their proposed non-hazardous waste recycling facility at Mc1, Road Five, Winsford Industrial Estate, Winsford, Cheshire, CW7 3RB (***the Site***).
- 1.1.2 An Environmental Permit Application for the Site was submitted to the Environment Agency on 6 September 2023, who subsequently responded on 23 August 2024 to request additional information, including: "Provide a revised environmental risk assessment that identifies the protected sites and species that are potentially at risk from your site. Please refer to the 'Identify receptors' section at the following link: Risk assessments for your environmental permit." Further liaison with Environment Agency on 2 September 2024 confirmed "On the environmental risk assessment, there are protected species within 250 metres of the proposed site, and these do not appear to be included in the risk assessment. May I refer you to the National Biodiversity Network (NBN) which is accessible and allows you to explore the local area. National Biodiversity Network (nbn.org.uk)".
- 1.1.3 A result, the Habitats Risk Assessment has been updated to assess the risks the Site poses to Great Crested Newts, which are located within 250m of the permit boundary (see Section 6.5).

1.2 SITE DETAILS

- 1.2.1 Clearfield Envirotech Limited (***the Operator***) proposes to operate a state-of-the-art non-hazardous wastes plastics and cardboard recycling facility at the Site. A detailed description of the waste storage and processing infrastructure and equipment to be installed is included in the Environmental Management System (Clearfield-Winsford-RP02-Final (EMS), which also includes details of how the facility will be managed to minimise the risks of pollution from operations, maintenance, accidents, incidents and any non-conformances.
- 1.2.2 The Site incorporates a dedicated and enclosed building, with impermeable concrete base. There are no drainage outlets inside the building and therefore no pathways to groundwater, surface water or uncontained land. All waste treatment activities will take place inside the building. Processing equipment will comprise shredding plant, up to two wash plants, which each incorporate rear end drying, up to two plastic extrusion plants and a baler for baling recycled products prior to off-site supply to customers.
- 1.2.3 The building is fitted with 4 roller shutter vehicular access doors on the northern side and 5 roller shutter doors on the southern side. Pedestrian access fire doors are also fitted for emergency evacuation in the event of a fire incident.
- 1.2.4 There is an external yard, which incorporates engineered, paved surface, it will be used

for storage of incoming baled waste, prior to transfer into the building for processing and recovery. A combination of open stockpiles with a minimum of 6m separation distances all around (i.e. to all four sides) and fireproof bays comprising 2 hour fire resistant concrete rear push walls and side walls will be used for the storage of baled waste. Where fire resistant bays are used, a 6m separation distance will be maintained in front of the bay and the maximum height of waste will be at least 1m lower than the top of the bay walls. A detailed Fire Prevention Plan has been prepared for the Site.

1.2.5 This Habitats Risk Assessment provides information relating to designated habitat sites in proximity to the proposed works at the Site.

1.2.6 The scope of this document is to:

- Provide the results of a desk study of: European Sites, i.e. RAMSAR sites, Special Areas of Conservation (SAC) and Special Protection Areas (SPA) within 10km of the site;
- Nationally designated sites, e.g. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) within 2km of the site;
- Locally designated sites, e.g. Local Nature Reserves (LNR) and Local Wildlife Sites (LWS) within 2km of the site.
- Provide further detail with regards to each habitat site, including reason for designation; and
- Identify the potential impacts of the proposed works and any significant likely effects on the designated habitat sites.

2 THE SITE

2.1.1 The Site is located on the Winsford Industrial Estate and is surrounded on all four sides by large industrial buildings. It is accessed off Road Five, which connects onto Road One that in turn leads onto the A54 'Middlewich Road'.

2.1.2 Winsford Industrial Estate is a large complex of industrial buildings and units extending circa 1.6km in a north south axis and circa 700m in an east west axis.

2.1.3 There are three European Sites, i.e. Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and RAMSAR sites within a 10km radius of the Site, namely:

- West Midlands Mosses (SAC), circa 7,175m west northwest;
- Midland Meres and Mosses Phase 2 RAMSAR Site, circa 7,175m west northwest;
- Oak Mere SAC, circa 9,220m west.

2.1.4 There are no Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR) or Local Nature Reserves (LNR) within 2km of the Site.

- 2.1.5 The nearest area of Priority Habitat is a belt of Deciduous Woodland located circa 250m north northeast of the Site. There are further areas of Priority Deciduous Woodland circa 570m and 730m northeast of the Site at the closest points. There is an area of Ancient Woodland circa 935m southeast of the Site.

3 LEGISLATION

3.1 THE CONSERVATION OF HABITATS AND SPECIES (AMENDMENT) (EU EXIT) REGULATIONS 2019 ('THE HABITAT REGULATIONS')

- 3.1.1 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. This legislation transposes into law (for England and Wales), the Habitats and Birds Directives.

- 3.1.2 The Habitat Regulations protect numerous wild plants and animals (as well as the habitats which support them) from activities such as destruction, disturbance, killing, collection (for private use or sale) and several other activities. It also sets out measures to control operations which could potentially damage the Natura 2000 network.

- 3.1.3 Regulation 105 requires planning authorities to assess the potential effects of plans on European Sites. Habitats Regulations Assessment ('HRA') is the process by which the requirements of the Habitats Directive are implemented and ensures that plans or projects will not adversely affect European Sites.

- 3.1.4 Reference in this report to 'European sites' should be taken to include the following:
- Special Areas of Conservation ('SACs') for habitats and species designated through the EU Habitats Directive;
 - Special Protection Areas ('SPAs') for the protection of wild birds and their habitats designated through the EU Birds Directive;
 - Ramsar sites, identified through the Convention on Wetlands of International Importance (Internationally important wetlands are designated under the Ramsar Convention 1971. UK Government policy states that the Ramsar sites and potential SPAs are afforded the same protection as SPAs and SACs for the purpose of considering development proposals that may affect them); and
 - Sites that are being considered for designation referred to as Sites of Community Interest, candidate SACs or proposed SPAs.

3.2 THE WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

- 3.2.1 The Wildlife and Countryside Act, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Conservation of Habitats and Species (Amendment) (EU

Exit) Regulations 2019 offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, i.e. SSSIs.

3.3 THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT (2000)

3.3.1 The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the Wildlife and Countryside Act. It places a duty on Government departments to have regard for biodiversity and provides increased powers for the protection and maintenance of SSSIs.

3.4 THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT (2006)

3.4.1 Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Section 41 (England) list habitats and species of principal importance to the conservation of biodiversity in England. These species and habitats are a material consideration in the planning process.

4 GUIDANCE

4.1 RISK ASSESSMENT FOR ENVIRONMENTAL PERMITS

4.1.1 This document has been prepared in accordance with Guidance 'Risk assessments for your environmental permit' and Habitats Regulations Assessment Form. Its purpose is to:

- Identify and assess the sources of risks from the Site;
- Identify the receptors, i.e. designated European Sites within a 10km radius and other statutory and non-statutory habitats within a 2km radius of the Site;
- Identify the pathways from the sources of the risks, i.e. those arising at the Site, to the receptors;
- Assess risks relevant to specific activities undertaken at the Site and check they are acceptable;
- Identify the measures in place to adequately control the risks.

5 DESIGNATED HABITAT SITES

5.1 EUROPEAN SITES

5.1.1 Magic Maps (<https://magic.defra.gov.uk/MagicMap.aspx>) has been used to identify the European Sites within a 10km radius of the proposed works at the Site. Details are summarised below and locations are shown on Figure 1.

5.1.2 The following European Sites, i.e. Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and RAMSAR sites have been identified within a 10km radius of the Site:

- West Midlands Mosses SAC, circa 7,175m west northwest;
- Midland Meres and Mosses Phase 2 RAMSAR Site, circa 7,175m west northwest;
- Oak Mere SAC, circa 9,220m west.

5.1.3 The Joint Nature Conservation Committee (JNCC) citation for **West Midlands Mosses SAC** states: that *“West Midlands Mosses contains three pools, one at Clarepool Moss and two at Abbots Moss, that are examples of dystrophic lakes and ponds in the lowlands of England and Wales, where this habitat type is rare. The lake at Clarepool Moss is unusual as a dystrophic type on account of its relatively base-rich character, which is reflected in the presence of a diverse fauna and flora. The two at Abbots Moss are more typical, base-poor examples. The dystrophic lakes and ponds at this site are associated with Schwingmoor development, a characteristic of this habitat type in the West Midlands. Schwingmoor is an advancing floating raft of bog-moss Sphagnum, often containing NVC type M3 Eriophorum angustifolium bog pool community, which grows from the edge of the pool and can completely cover over the pool.*

“West Midlands Mosses represents Schwingmoor vegetation. Floating rafts of Sphagnum-dominated vegetation have developed over semi-liquid substrates within basins. In the UK this type of Sphagnum-dominated vegetation with a scatter of sedges Carex species and cranberry Vaccinium oxycoccos is confined to this part of England and mid-Wales.”

5.1.4 The JNCC citation for West Midlands Mosses SAC further states:

- *Annex I habitats that are a primary reason for selection of this site*
 - *3160 Natural dystrophic lakes and ponds*

West Midlands Mosses contains three pools, one at Clarepool Moss and two at Abbots Moss, that are examples of dystrophic lakes and ponds in the lowlands of England and Wales, where this habitat type is rare. The lake at Clarepool Moss is unusual as a dystrophic type on account of its relatively base-rich character, which is reflected in the presence of a diverse fauna and flora. The two at Abbots Moss are more typical, base-poor examples. The dystrophic lakes and ponds at this site are associated with Schwingmoor development, a characteristic of this habitat type in the West Midlands. Schwingmoor is an advancing floating raft of bog-moss Sphagnum, often containing NVC type M3 Eriophorum angustifolium bog pool community, which grows from the edge of the pool and can completely cover over the pool; the site has also been selected for this Annex I feature (7140 Transition mires and quaking bogs).

- *7140 Transition mires and quaking bogs*

West Midlands Mosses represents Schwingmoor vegetation. Floating rafts of Sphagnum-dominated vegetation have developed over semi-liquid substrates within basins. In the UK this type of Sphagnum-dominated vegetation with a scatter of sedges Carex species and cranberry Vaccinium oxycoccos is confined to this part of England and mid-Wales.

- *Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site - Not Applicable*
- *Annex II species that are a primary reason for selection of this site - Not Applicable*
- *Annex II species present as a qualifying feature, but not a primary reason for site selection - Not Applicable*

5.1.5 The JNCC citation for **Midland Meres and Mosses Phase 2 RAMSAR Site** describes the area as *“a geographically diverse series of lowland open water and peatland sites in the north-west Midlands of England and north-east Wales. These have developed in natural depressions in the glacial drift left by receding ice sheets which formerly covered the Cheshire/Shropshire Plain. The 18 component sites include open water bodies (meres), the majority of which are nutrient-rich with associated fringing habitats, reed swamp, fen, carr and damp pasture. Peat accumulation has resulted in the nutrient-poor peat bogs (mosses) forming in some sites on the fringes of the meres or completely infilling basins. In a few cases the result is a floating quaking bog or schwingmoor. The wide range of resulting habitats support nationally important flora and fauna.”*

5.1.6 The JNCC citation states that the criteria for designating Midland Meres and Mosses Phase 2 RAMSAR Site are as follows:

- *Ramsar criterion 1 - The site comprises a diverse range of habitats from open water to raised bog.*
- *Ramsar criterion 2 - Supports a number of rare species of plants associated with wetlands, including the nationally scarce cowbane Cicuta virosa and, elongated sedge Carex elongata. Also present are the nationally scarce bryophytes Dicranum affine and Sphagnum pulchrum.*

Also supports an assemblage of invertebrates including several rare species. There are 16 species of British Red Data Book insect listed for this site including the following endangered species: the moth Glyphipteryx lathamella, the caddisfly Hagenella clathrata and the sawfly Trichiosoma vitellinae.

5.1.7 The JNCC citation for **Oak Mere SAC** states:

- *Annex I habitats that are a primary reason for selection of this site*
 - *3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)*

Oak Mere, in the West Midlands of England, is a lake formed within sediments

*that are low in nutrients and oligotrophic. It is a large waterbody that has formed in a kettle hole in the fluvio-glacial sands of the Cheshire Plain. The site has clear water of low nutrient status characteristic of oligotrophic waters and a marginal zone of shoreweed *Littorella uniflora*. The site supports an assemblage of plants that are now rare in the lowlands of England, including floating mats of bog-moss *Sphagnum* spp. and the scarce narrow small-reed *Calamagrostis stricta*.*

○ *7140 Transition mires and quaking bogs*

*Open water and peat deposits lie in this kettle-hole depression within Delamere Forest, and peat-cutting has given rise to additional pools and fens. The water is acidic, but slightly nutrient-rich. There are transitions at the water's edge with soft rush *Juncus effusus*, water horsetail *Equisetum fluviatile*, common spike-rush *Eleocharis palustris*, marsh pennywort *Hydrocotyle vulgaris*, the moss *Drepanocladus fluitans* and bulrush *Typha latifolia*. Small depressions in the peat are occupied by bottle sedge *Carex rostrata*, common cottongrass *Eriophorum angustifolium*, purple moor-grass *Molinia caerulea*, cross-leaved heath *Erica tetralix* and round-leaved sundew *Drosera rotundifolia*.*

- *Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site - Not Applicable*
- *Annex II species that are a primary reason for selection of this site - Not Applicable*
- *Annex II species present as a qualifying feature, but not a primary reason for site selection - Not Applicable.*

5.1.8 There are no Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR), Biosphere Reserves or RSPB Reserves within a 2km radius of the Site.

5.1.9 The nearest Priority Habitat is circa 250m north northeast of the Site and the closest area of Ancient Woodland is circa 935m to the southeast, see Figure 2.

Figure 1 – European Sites Within a 10km Radius

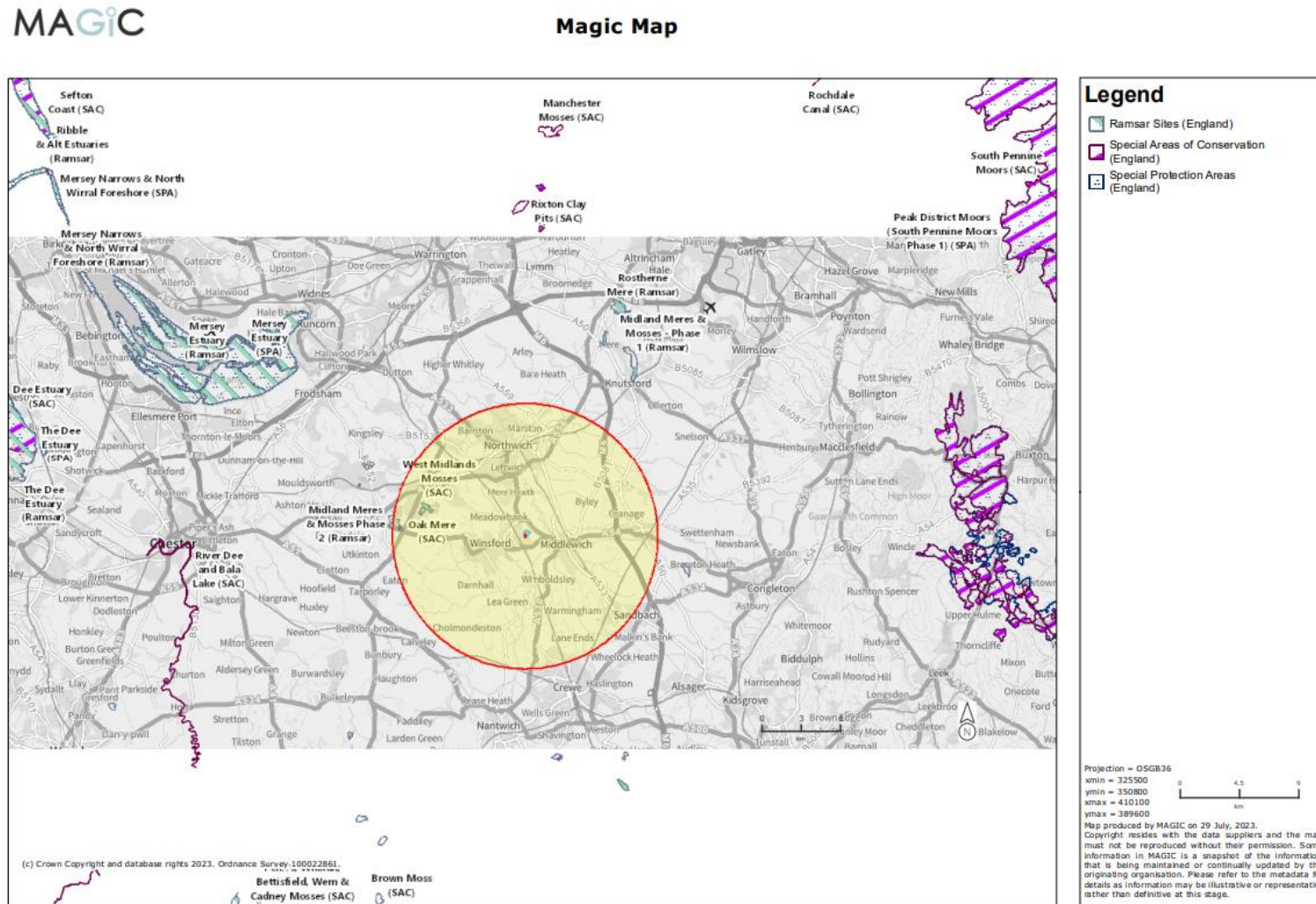
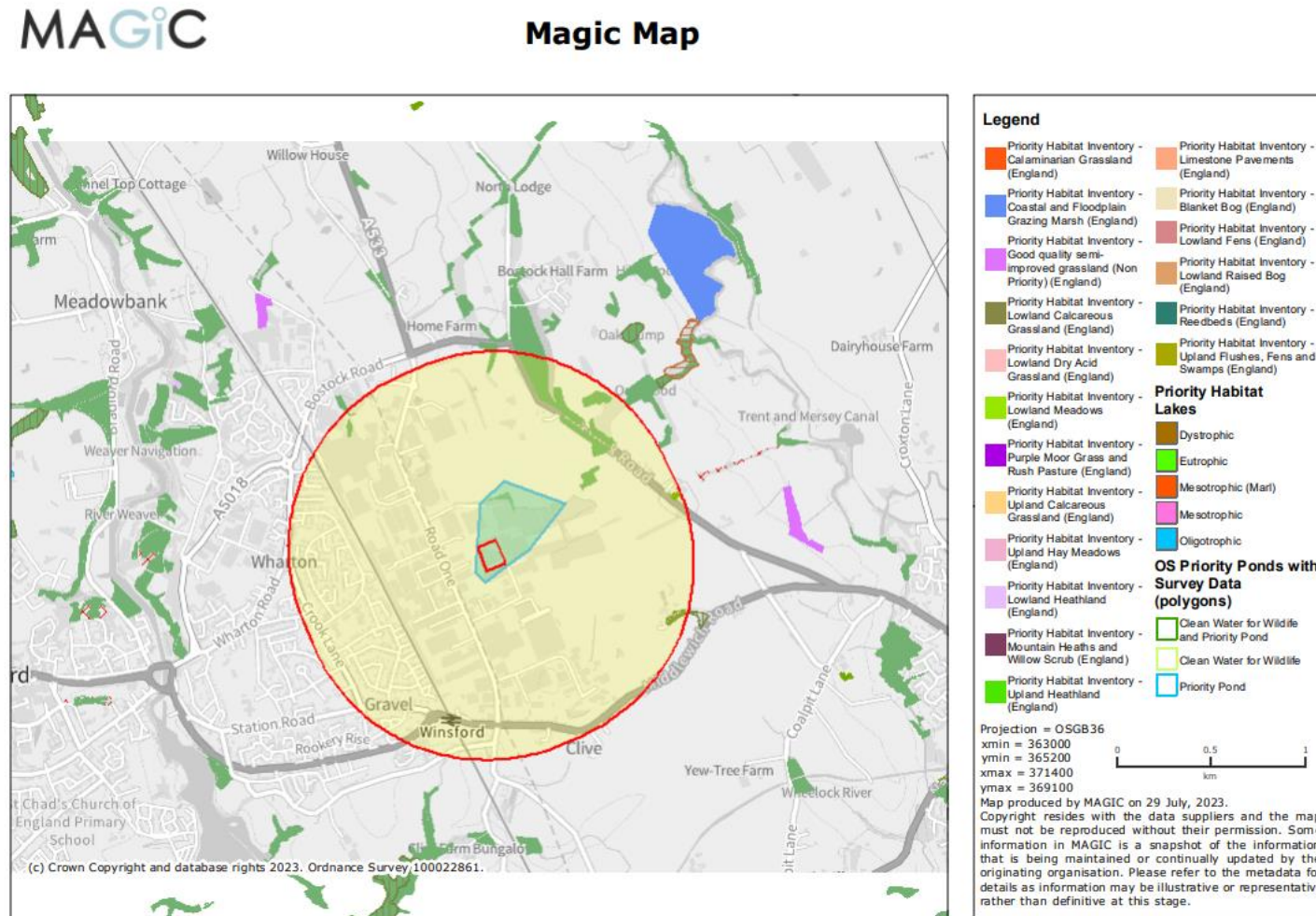


Figure 2 – Priority Habitats and Deciduous Woodland



6 IMPACTS AND THREATS

6.1 IMPACT THREATS TO EUROPEAN SITES

6.1.1 This report considers the impacts and effects of the proposed works on the designated European Sites.

6.1.2 Impacts and effects are defined as follows:

- ‘Impact’ - as an action being taken/event happening (e.g. increased sediment in run-off); and
- ‘Effect’ - as the change in an ecological receptor resulting from that action/event (e.g. lower water quality affecting a habitat’s ability to support a species).

6.1.3 There are a number of impacts on the **West Midlands Mosses SAC** that have codes within the JNCC Standard Data Form for the site, these are set out in Table 1.

Table 1 – Impact Threat Codes Specific to West Midland Mosses SAC

JNCC Threat Code	Information	Threat from Inside or Outside
J02	Human induced changes in hydraulic conditions	Both (Inside and Outside)
K02	Biocenotic evolution, succession	Inside
H04	Air pollution, air-borne pollutants	Both (Inside and Outside)
H02	Pollution to groundwater (point sources and diffuse sources)	Both (Inside and Outside)
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	Inside

6.1.4 The JNCC citation for **Midland Meres and Mosses Phase 2 RAMSAR Site** states that the factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use are:

- Eutrophication
- Introduction/invasion of non-native plant species.

6.1.5 The JNCC Standard Data Form for **Oak Mere SAC** identifies the following threats on the site.

Table 2 – Impact Threat Codes Specific to Oak Mere SAC

JNCC Threat Code	Information	Threat from Inside or Outside
H02	Pollution to groundwater (point sources and diffuse sources)	Both (Inside and Outside)
H04	Air pollution, air-borne pollutants	Both (Inside and Outside)
J02	Human induced changes in hydraulic conditions	Both (Inside and Outside)
I01	Invasive non-native species	Both (Inside and Outside)

6.2 RISK ASSESSMENT OF IMPACT THREATS ON EUROPEAN SITE

6.2.1 Table 3 below provides a risk assessment of the potential impacts on European Sites.

Table 3 – Risk Assessment of European Sites

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
West Midlands Mosses SAC					
J02 - Human induced changes in hydraulic conditions	Changes in groundwater or surface water levels	Groundwater flow Surface water flow	West Midlands Mosses SAC	All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater. The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities.	Negligible
K02 - Biocenotic evolution, succession	Encroachment, colonisation by species not currently present in the SAC. Changes to the SAC that could promote ecological succession etc	Airborne transfer or overland surface water flow and deposition of non-native seeds and pollen.	West Midlands Mosses SAC	The Site is 7,175m distant from the SAC at the nearest point and there is no surface water discharge from the facility to the designated habitat. There is no requirement for site personnel and operations to encroach on the SAC. All waste treatment activities will be undertaken in a sealed building.	Negligible

Table 3 – Risk Assessment of European Sites

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
H04 - Air pollution, air-borne pollutants	Point source or fugitive emissions to air of pollutants or gases giving rise to nitrogen or acid gas deposition	Airborne transfer	West Midlands Mosses SAC	Wastes will not be burnt on site and there are no point source emissions of polluting substances to atmosphere. Therefore acid gas and nitrogen deposition from the Site will not take place. All waste treatment activities will take place inside the building, which is fully sealed. All incoming wastes will be in baled form, which will help to minimise dust emissions, and stored in engineered concrete bays or designated stockpile areas before transfer into the building. Hoses will be available to damp down operational areas of the Site during dry and dusty conditions. A Dust and Emissions Management Plan (DEMP) has been prepared for the Site. As the Site is circa 7,175m distant from the SAC, the risk of fugitive dust impact is very low.	Low
H02- Pollution to groundwater (point sources and diffuse sources)	Point source emissions of pollutants to groundwater or diffuse groundwater flow to SAC	Groundwater flow	West Midlands Mosses SAC	As above - All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater. The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities.	Negligible

Table 3 – Risk Assessment of European Sites

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
F03 - Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals	Human interference	Land	West Midlands Mosses SAC	There is no requirement for site personnel or activities to access or encroach on the SAC. Site development will not encroach onto the designated habitat, which is circa 7,175m distant.	Negligible
Midland Meres and Mosses Phase 2 RAMSAR Site					
Eutrophication	Nutrient enrichment of SAC due to agricultural practices, run-off of surface water or diffuse groundwater flow	Groundwater flow Surface water flow	Midland Meres and Mosses Phase 2 RAMSAR Site	As above - All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater. The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities.	Negligible
Introduction/invasion of non-native plant species	Human interference or colonisation by non-native species such as Himalayan balsam or Japanese Knotweed.	Land, Airborne transfer or surface water flow/run-off	Midland Meres and Mosses Phase 2 RAMSAR Site	There is no requirement for site personnel or activities to access or encroach on the Ramsar Site. Site development will not encroach onto the designated habitat, which is circa 7,175m distant.	Negligible

Table 3 – Risk Assessment of European Sites

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
Oak Mere SAC					
H02 - Pollution to groundwater (point sources and diffuse sources)	Point source or fugitive emissions to air of pollutants or gases giving rise to nitrogen or acid gas deposition	Airborne transfer	Oak Mere SAC	As above - Wastes will not be burnt on site and there are no point source emissions of polluting substances to atmosphere. Therefore acid gas and nitrogen deposition from the Site will not take place. All waste treatment activities will take place inside the building which is fully sealed. All incoming wastes will be in baled form, which will help to minimise dust emissions, and stored in engineered concrete bays or in designated stockpiles before transfer into the building. Hoses will be available to damp down operational areas of the Site during dry and dusty conditions. A Dust and Emissions Management Plan (DEMP) has been prepared for the Site. As the Site is circa 9,220m distant from the SAC, the risk of fugitive dust impact is very low.	Low
H04 - Air pollution, airborne pollutants	Point source emissions of pollutants to groundwater or diffuse groundwater flow to SAC	Groundwater flow	Oak Mere SAC	As above.	Negligible

Table 3 – Risk Assessment of European Sites

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
J02 - Human induced changes in hydraulic conditions	Changes in groundwater or surface water levels	Groundwater flow Surface water flow	Oak Mere SAC	As above - All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater. The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities.	Negligible
I01 - Invasive non-native species	Human interference or colonisation by non-native species such as Himalayan balsam or Japanese Knotweed	Land, Airborne transfer or surface water flow/run-off	Oak Mere SAC	There is no requirement for site personnel or activities to access or encroach on the SAC. Site development will not encroach onto the designated habitat, which is circa 9,220m distant.	Negligible

6.3 RISK ASSESSMENT OF IMPACT THREATS ON PRIORITY HABITATS AND ANCIENT WOODLAND

- 6.3.1 There are areas of Priority Habitat and an Ancient Woodland within 1km of the Site, see Figure 2.
- 6.3.2 Impact threats to these habitats are based on the Environment Agency's Habitats Directive Matrix (October 2012), which identifies specific risks from waste facilities and installations. These are listed in Table 4.

Table 4 – Impact Threats to Priority Habitat and Ancient Woodland

Impact Threat
Disturbance
Nutrient Enrichment
Habitat Loss
Predation
Siltation
Smothering
Toxic Contamination

6.4 RISK ASSESSMENT OF IMPACT THREATS TO PRIORITY HABITAT AND ANCIENT WOODLAND

- 6.4.1 Table 5 below provides a risk assessment of the potential impacts on Priority Habitat and Ancient Woodland in close proximity to the Site.

Table 5 Risk Assessment of Priority Habitat and Ancient Woodland

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
Disturbance	Noise, vibration and particulate emissions from site activities	Air and ground.	Disturbance to fauna inhabiting areas of Priority Habitat and Ancient Woodland, particularly: Deciduous Woodland, circa: <ul style="list-style-type: none"> - 250m north northeast of the Site - 570m northeast of the Site - 935m northeast of the Site Stanthorne Hall Farm Ancient Woodland, circa 935m southeast of the Site Traditional Orchard, circa 1km east of the Site.	All waste treatment activities will take place in a building, which is fully sealed and fitted with 4 roller shutter vehicular access doors on the northern side and 5 roller shutter doors on the southern side. The fabric of the building provide noise attenuation. Between the hours of 7.00pm and 7.00am there will be no waste deliveries or collections of recycled products. The doors to the building will remain closed throughout this period and all activities will be internal to the building. Between the hours of 7.00am and 7.00pm, the vehicular access roller shutter door will be kept closed other than when vehicles are entering and exiting the building. The processing plant is not inherently noisy. To minimise noise emissions, all vehicles, plant and machinery operated at the Site will be maintained in accordance with the manufacturer’s specification. Plant and vehicles will be switched off when not in use and no activity will be carried out beyond the permitted hours of working.	Low (provided mitigation measures are implemented)

Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
Nutrient Enrichment	Any free liquors, surface water run-off. Run-off could contain elevated concentrations of contaminants.	Run-off water onto uncontained land or into surface water bodies such as the ditches to the east of the Site.	Priority Habitat and Ancient Woodland, particularly: Deciduous Woodland, circa: - 250m north northeast of the Site - 570m northeast of the Site - 935m northeast of the Site Stanthorne Hall Farm Ancient Woodland, circa 935m southeast of the Site Traditional Orchard, circa 1km east of the Site.	All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater. The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities. There are no discharges from the Site to surface watercourse, including the ditches to the east of the facility.	Low (provided mitigation measures are implemented)
Habitat Loss	Encroachment, contaminated run-off water, particulate emissions.	Ground, surface water run-off and air.	As above	Waste operations will not encroach onto any of the areas of Priority Habitat, Ancient Woodland or Traditional Orchard and there is no requirement for site personnel or visitors to access these areas. The nearest area of Priority Habitat is circa 250m north northeast of the Site.	Low (provided mitigation measures are implemented)
Predation	Scavenging birds, insects, pests and vermin	Ground, water and air	As above	The deposit of non-hazardous plastics and cardboard wastes can attract gulls and other scavenging birds, insects, vermin and other pests.	Low (provided mitigation measures are implemented)

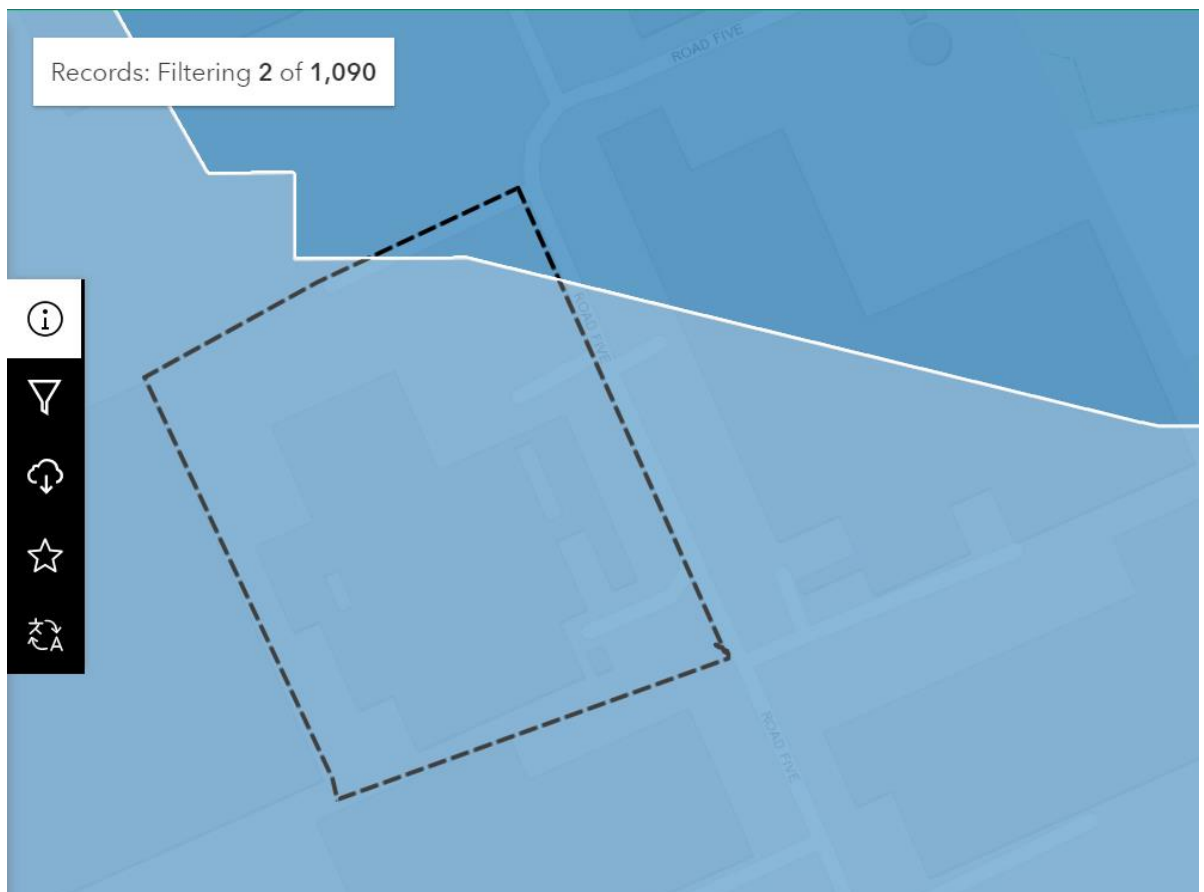
				<p>Waste pre-acceptance and acceptance checks are undertaken to minimise the risk of vermin or insect infested waste being inadvertently received on site and visual inspection is made by site operatives of waste deliveries on arrival at the Site and when waste bales are unloaded on the external yard.</p> <p>Wastes are processed on a first in first out basis typically within 4 days of receipt but as a worst case scenario with a fortnight to ensure a rapid turnover of materials.</p> <p>Sweeping and disinfecting waste storage bays, stockpiles and processing areas (the regular emptying, sweeping and disinfecting of bays, stockpiles and operational areas of the Site will ensure a high standard of cleanliness and prevent wastes accumulating over a significant period of time or becoming putrescible).</p> <p>Ensuring that waste does not accumulate in inaccessible areas such as behind push walls, pipe work or in corners.</p> <p>Daily and weekly site inspections by the Site Manager and other Technically Competent Person.</p> <p>Monthly visits by a pest control contractor to monitor pest numbers and to apply rodenticides, insecticides etc, as required.</p> <p>Quarantine procedures are in place to manage any identified infected wastes.</p>	
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Threat / Hazard	Source	Pathway	Receptor	Mitigation	Overall Risk of Negative Effects
Siltation	Suspended solids in surface water run-off.	Surface water drainage from site and overland flow of run-off water.	As above	<p>All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater or no discharges to surface watercourse, including the ditches to the east of the Site.</p> <p>The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities.</p>	Low (provided mitigation measures are implemented)
Smothering	Particulate emissions. Suspended solids in surface water discharge	Air Surface water run-off	As above	Mitigation measures detailed above to ensure adequate dust control and surface water management.	Low (provided mitigation measures are implemented)
Toxic Contamination	Any potentially contaminated run-off water Particulate emissions	Water and air	As above	Mitigation measures detailed above to ensure adequate surface water management and ensure trade effluent is discharged to foul sewer and only clean surface water run-off is discharged to surface water sewer, via Class 1 interceptors.	Low (provided mitigation measures are implemented)

6.5 RISK ASSESSMENT OF IMPACT THREATS TO GREAT CRESTED NEWTS

- 6.5.1 Review of the Natural England Risk Zones for Cheshire reveals that the Site is predominantly located in a Green Zone, which contain sparsely distributed Great Crested Newts (GCN) and are less likely to contain important pathways of connecting habitat for this species (<https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::gcn-risk-zones-cheshire/about>).
- 6.5.2 However, the northeast corner of the Site is shown as being in an Amber Zone, which are described as containing main population centres for GCN and comprise important connecting habitat that aids natural dispersal.
- 6.5.3 Figure 3 is an extract from the Natural England Risk Zones for Cheshire (<https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::gcn-risk-zones-cheshire/explore?location=53.198524%2C-2.489906%2C17.55>) and shows the Green Zone in pale blue and the Amber Zone in darker blue. The Site boundary is marked by a black dashed line.

Figure 3 – Great Crested Newt Risk Zones



- 6.5.4 It is important to note that the Site comprises an in-situ large building and external paved area, which historical maps show was fully constructed by 1981, together with adjacent industrial premises to the east, south and west. Neighbouring industrial units to the north

were constructed by 2010. Proposed waste operations at the Site will take place entirely in the existing building and external paved yard. There is no requirement to expand the premises to incorporate currently unpaved land or vegetated areas.

- 6.5.5 The Site is located on the Winsford Industrial Estate and is surrounded to all four sides by other industrial units (see Figure 4 below). The surfaces of the industrial estate predominantly comprise paved surfaces, i.e. concrete hardstanding and tarmac roads. In addition, there is a busy paved industrial estate road (Road 5) along the entire length of the eastern boundary of the Site. This road is used by other industrial units to the north and east, as well as Clearfield Envirotech Limited to the west of the road. Within the industrial estate, there are small areas of maintained grass verges that are regularly cut and mowed to maintain a tidy appearance.

Figure 4 - Site Location and Surrounding Area



- 6.5.6 The northeast corner of the Site that is shown as Amber Zone on the Natural England Risk Zones for Cheshire comprises the entrance to the facility and a concrete haul road. Figure 5 shows the Site car park looking towards the northeast boundary of the facility (i.e. towards the Amber Zone). All of this area is paved except the maintained green verge on the eastern boundary of the Site.

Figure 5 – Looking Towards the Northeast Corner of the Site



- 6.5.7 The distance to nearest non-industrial estate land from the Site boundary is circa 155m to the east. The nearest surface water course (a ditch close to the edge of the industrial estate) is circa 160m east. Surfaces in between comprise engineered pavement and there is no where the Site is linked to the breeding ponds of the newts by good habitat.
- 6.5.8 Review of Magic Map (<https://magic.defra.gov.uk/MagicMap.aspx>) shows that the nearest pond or lake is circa 340m east of the Site boundary at the closest point.

7 CONCLUSIONS

- 7.1.1 The Habitats Risk Assessment of European Sites shown in Table 4 shows that risks to West Midlands Mosses SAC, Midland Meres and Mosses Phase 2 RAMSAR Site and Oak Mere SAC are low due to the control measures in place on site, the absence of any direct surface water or groundwater discharges to the designated habitats, the absence of any combustion activities or point source emissions to air and also the distances between the Site and the receptors, which is over 7km.
- 7.1.2 Any inadvertent dust emissions from the site are unlikely to impact the European Sites. Environment Agency guidance on 'Monitoring of Particulate Matter in Ambient Air Around Waste Facilities' states that large particles (>30 µm) responsible for most dust annoyance mostly deposit within 100m of the source, intermediate-sized particles (10–30 µm) are likely to travel up to 200–500m and smaller particles (<10 µm) can travel up to 1km from the source. Therefore, any inadvertent dust emissions from the site are likely to drop out of the air stream prior to reaching the SACs and the RAMSAR Site.
- 7.1.3 In addition, there are several areas of Priority Habitat, an Ancient Woodland and a Traditional Woodland within 1km of the Site, including an area of Priority Habitat Deciduous Woodland that is located circa 250m to the north northeast. Therefore detailed control measures are required to minimise risks to designated sites.
- 7.1.4 To minimise noise emissions, all vehicles, plant and machinery operated at the site will be maintained in accordance with the manufacturer's specification. Plant and vehicles will

be switched off when not in use and there will be no night time lorry movements into and out of the facility. All waste treatment process will take place in an enclosed and fully sealed building, which will provide noise attenuation.

- 7.1.5 To prevent dust emissions off site, a hose will be used to dampen down the external yard during operational areas and the Site access road, particularly during dry and dusty conditions. In addition, all wastes will be received in baled form and stored in engineered fireproof concrete bays and designated stockpiles, which will help to minimise fugitive dust emissions. Dust netting will be installed on the perimeter security fencing in the waste storage area to minimise the risk of any inadvertent dust or litter escape from the Site. In addition, portable netting will be used and placed in close proximity to the potential source of dust or litter emission, taking care to maintain the 6m separation distance from the front of bays or to all 4 sides of an open stockpile.
- 7.1.6 Waste bales will be unloaded from delivery vehicles by forklift truck or mechanical grab and stacked in the bays and designated stockpiles. Where concrete bays are used, the top of the bay walls will be a minimum of 1m higher than the top of the stacked bales. Bales will be transferred into the building, where they will be split and processed to produce recycled products for supply to customers.
- 7.1.7 A Dust Emissions Management Plan has been prepared for the Site and is included in the permit application. It will be implemented to ensure dust is adequately controlled.
- 7.1.8 All operational areas of the Site comprise engineered impermeable surfaces and there are no pathways to groundwater. The surface water drainage system has been designed by an independent civil and structural engineering consultancy to ensure surface water run-off from the external yard area is passed through Class 1 Interceptors before discharge to sewer. Spent wash water from the wash plant will be discharged to foul sewer in accordance with a Trade Effluent Discharge Consent issued by United Utilities.
- 7.1.9 This Habitats Risk Assessment shows that the risk to nature sites and Great Crested Newts from all potential hazards is low provided the mitigation measures detailed above are implemented and undertaken in accordance with this report and the site's Environmental Management System.