

APPENDIX 8: ECOLOGY
APPENDIX 8.1: PEA



INCA Advice Note 2022-43

Green Lithium Refining Limited site, Teesport Preliminary Ecological Appraisal

Introduction

INCA has been commissioned by Sol Environmental Ltd to undertake a preliminary ecological appraisal (PEA) of land at Teesport. The area of land covered by the PEA is limited to that shown in Figure 1, which is henceforth referred to as the site.

This advice note has been produced for Sol Environmental for the purposes of identifying any ecological constraints and opportunities that would pertain to the development of the site. This report has not been produced for supporting a planning application.



Figure 1. survey area

Survey details

A walkover survey of the site was undertaken on 2nd September 2022, in appropriate weather conditions. The survey was undertaken by Ian Bond CEnv MCIEEM and Mark Morris CEnv MCIEEM, both ecologists with INCA.

All parts of the site were walked and assessed for their potential to support protected, priority or otherwise notable species. The habitats were assessed using the Defra BM3.1 Biodiversity Metric (BM3.1), with habitat blocks being differentiated from each other on the basis of the BM3.1 assessment tool (NB in some cases habitats graded into each other, in which case a judgement was made on where the appropriate boundaries lay).

The survey was undertaken outside of the nesting bird season and also of the survey season for several other species. The likelihood of the presence of notable species was therefore assessed on the basis of the habitats present on site and on INCA's extensive knowledge of the distribution of those species in the surrounding area, based on previous surveys and casual records. The survey was undertaken towards the end of the botanical survey season, following a notably dry summer, therefore some plant species may have been missed, particularly grasses which were largely dry at the time of the survey. Despite these limitations, it is considered that a sufficiently thorough assessment was undertaken.

Assessment

Nesting birds

The site will support a variety of nesting birds; these will impose some constraints on the timing or extent of vegetation clearance.

Dingy Skipper butterfly

Dingy Skipper is a national and local Priority species. Teesside is arguably a national stronghold for the species and it is widespread in this area. There is a significant amount of suitable habitat for this species on the site therefore development of this site will require mitigation or compensation for this species.

Invasive Non-Native Plant Species (INNS)

The only INNS that was observed on the site, which is listed under Schedule 9 of the Wildlife & Countryside Act 1981, as it being an offence to cause it to spread, was Himalayan Cotoneaster *Cotoneaster simonsii*. This occurred as a few individual plants, the location of which has been logged on GPS. An appropriate method statement will need to be provided to deal with these.

Protected species

Other than nesting birds, no protected species are anticipated to be present on the site.

Priority species

It is likely that Brown Hare, Common Toad and some priority Lepidopteran species will be present on the site, at least on occasion, however the site is unlikely to support any populations of any significance therefore these are not considered a constraint.

In terms of priority bird species, Skylark was observed during the survey and it is likely that the site will support at least two pairs. Linnet was also observed and it is possible that it would nest in the scrub. Compensation is therefore likely to be required for nesting birds.

Habitats

Figure 1 shows the various habitat blocks on the site. These boundaries are shown for illustrative purposes and will be subject to a slight refinement in line with Table 1. The various habitat blocks are described below and have been assigned the number of Biodiversity Units (BDUs) according to BM3.1.

Habitat Block 1. Principally bramble scrub but with some Elder and various young trees.

Habitat Block 2. Recently made ground from infill with iron slag. Partly colonised by Narrow-leaved Ragwort, which is an ephemeral species, nevertheless is classed as bare ground.

Habitat Block 3. This area has had the vegetation scraped off, probably 2-3 years ago, to reveal a clay substrate. It is principally bare ground with a variety of ruderal species though with grass starting to re-colonise and notably a high proportion of Birds-foot Trefoil. It is considered as grassland as a best-fit with BM3.1

Habitat Block 4. Fairly rank grassland with a low proportion of herb species.

Habitat Block 5. Herb-rich grassland with a shorter sward than the surrounding grassland areas. Technically it comes out as “moderate” condition under BM3.1 though our professional judgement is that “fairly-good” would be a more appropriate description. This is because it only just fails on the presence of INNS and the number of plant species per square metre is on the borderline between moderate and good.

Habitat Block 6. This is the embankment which forms the southern and eastern perimeters. It currently comprises around 50% scrub so could arguably be classed as grassland, though scrub will inevitably increase over time.

Habitat Block 7. Fairly rank grassland with a low proportion of herb species. Scrub comprises approximately 5-10% of this area.

Habitat Block 8. Two narrow verges between the road and the car park. These consist of a variety of ruderal plant species, although these are well established and some scrub. It is classed as grassland as a best-fit with BM3.1.

Habitat Block	Habitat type	Area (ha)	Condition	BDUs
1	Mixed scrub	0.16	Moderate	1.28
2	Bare ground	0.78	n/a	0
3	Other Neutral Grassland	0.48	Poor	1.92
4	Other Neutral Grassland	0.79	Poor	3.16
5	Other Neutral Grassland	3.46	Moderate	27.68
6	Mixed scrub	0.93	Moderate	7.44
7	Other Neutral Grassland	1.40	Poor	5.60
8	Other Neutral Grassland	0.1	Poor	0.40
Total		8.10		47.48

Conclusion and recommendations

The habitats total 47.48 BDUs which will need to be provided either on-site or off-site as compensation. Depending on when the planning application is submitted, there may be a requirement to provide 10% net gain on top of that.

Notwithstanding that Habitat Block 3 is likely to support Dingy Skipper butterfly, the only habitat of note was Habitat Block 5 which was herb-rich grassland. This is reflected in the high proportion of the BDUs that are associated with it. If it is possible to retain some of this habitat then that could make a significant contribution to reducing the BDU burden. Also it would be fairly straightforward to enhance the habitat so that it generates more BDUs, thereby offsetting some of the BDU burden on-site.

It is advised that the vegetation is cleared outside of the nesting bird season, taken to be March-August inclusive. While planning conditions concerning nesting birds usually come with the standard proviso that the vegetation can be cleared in the nesting bird season if it is first checked by an ecologist who can confirm that no birds are nesting on the site, it is very unlikely that would apply; nesting birds are almost inevitable in this situation.

The Cotoneaster plants themselves would be very easy to deal with as they can be dug out by hand and won't grow back. One of the plants had produced berries, so the ground within the immediate proximity to that plant will need to be dealt with appropriately so as not to spread any seeds.

No other ecological constraints were identified and none would be expected in this location.

APPENDIX 8.2: LEGISLATION

APPENDIX

Relevant Legislation and Policy

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. Under the Habitats Regulations it is an offence to deliberately capture, kill or disturb¹ wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

Wildlife & Countryside Act 1981

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act;
- intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act;
- intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act; or
- Plant or cause to grow in the wild any plant species listed under Schedule 9 of the Act.

Natural Environment & Rural Communities (NERC) Act 2006

Section 40 of the NERC Act 2006 places a duty on public authorities to have regard to the purpose of conserving biodiversity to have due regard for biodiversity and nature conservation during the course of their operations. Public authorities include government departments, local authorities and statutory undertakers.

Section 41 of the Act (Section 42 in Wales) requires the publication of a list of habitats and species which are of principal importance for the purpose of conserving biodiversity. The Section 41 list is used to guide authorities in implementing their duty to have regard to the conservation of biodiversity.

Note that Sections 40 and 42 were superseded in Wales by the Environment (Wales) Act 2016 (see below).

National Planning Policy

As noted in Chapter 4 the National Planning Policy Framework (NPPF)² sets out guidance for local planning authorities and decision-makers in how to apply planning policies when drawing up plans and making decisions about planning applications. Along with Government Circular 06/053, the broad policy objectives in relation to the protection of biodiversity and geological conservation in England through the planning system are set out. Specific policies relating to habitats and biodiversity are set out in paragraphs 170 and 174-177 of the NPPF.

Paragraph 170 states that:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development f) should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate”.

Paragraph 174 states that:

“To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”

Paragraph 175 of the NPPF states that:

“When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.”*

Paragraphs 176-177 relate to European sites (referred to as habitats sites) and state:

“The following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;*
- b) listed or proposed Ramsar sites; and*

- c) *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

Local Planning Policy

Redcar and Cleveland Local Plan

Policy N2 of this Plan is in reference to Green Infrastructure and states:

“We will aim to protect and enhance the green infrastructure network. Opportunities to incorporate green infrastructure into developments should be sought, in accordance with the Tees Valley Green Infrastructure Strategy. Green infrastructure should be fundamental to the planning of major new development and re-development schemes, and should help to integrate development with surrounding townscape and landscape, and with adjoining communities.

Green infrastructure should be designed to high standards of quality and sustainability and aim to be multi-functional, link to the wider green infrastructure network, improve visual amenity, enhance community activity, support the provision of priority natural habitats and species, and seek opportunities to improve the water environment.

We will protect and support the enhancement, creation and management of our green infrastructure network, to improve its quality, value, multi-functionality and accessibility...

...Where appropriate, and economically viable, the Council will seek developer contributions towards the provision and maintenance of green infrastructure. Where there is a loss of green infrastructure resource a principle of ‘net gain’ should apply where possible.”

Policy N4 of this Plan is in reference to Green Infrastructure and states:

“We will protect and enhance the borough’s biodiversity and geological resources. Support will be given to high quality schemes that enhance nature conservation and management, preserve the character of the natural environment and maximise opportunities for biodiversity and geological conservation, particularly in or adjacent to, Biodiversity Opportunity Areas in the wider Tees Corridor, Teesmouth, East Cleveland and Middlesbrough Beck Valleys areas. We will protect and preserve local, national and international priority species and habitats and promote their restoration, re-creation and recovery. Biodiversity and geodiversity should be considered at an early stage in the development process, with appropriate protection and enhancement measures incorporated into the design of development proposals, recognising wider ecosystem services and providing net gains wherever possible. Detrimental impacts of development on biodiversity and geodiversity, whether individual or cumulative, should be avoided. Where this is not possible mitigation, or lastly compensation, must be provided as appropriate. Proposals will be considered in accordance with the status of biodiversity and geodiversity sites within the hierarchy.

Internationally important sites

Priority will be given to protecting our internationally important sites, including the Teesmouth and Cleveland Coast Special Protection Area/Ramsar and European Marine Site, and the North York Moors Special Protection Area and Special Area of Conservation. Development that is not directly related to the management of the site, but which is likely to have a significant effect on any internationally designated site, irrespective of its location and when considered both alone and in combination with other plans and projects, will be subject to an Appropriate Assessment.

Development requiring Appropriate Assessment will only be allowed where:

- a. it can be determined through Appropriate Assessment at the design stage that, taking into account mitigation, the proposal would not result in adverse effects on the site's integrity, either alone or in combination with other plans or projects.*


Within 6km of the Teesmouth and Cleveland Coast SPA and Ramsar Site, as illustrated on the Policies Map, proposals that would result in a net increase in residential units, or other development that would lead to increased recreational disturbance of the site's interest features, will be expected to contribute towards strategic mitigation measures identified in the Recreation Management Plan. This is to ensure that adverse effects on the site's integrity can be avoided. Any alternative suitable mitigation would need to be proven effective and agreed with the Council, in consultation with relevant statutory consultees or

as a last resort, Appropriate Assessment proves that there are no alternatives and that the development is of overriding public interest and appropriate compensatory measures are provided."

APPENDIX 8.3: UK Habitat Map of the Site



Habitat Blocks

 g3c - other neutral grassland

 h3 - dense scrub

 u1c - artificial unvegetated unsealed surface