Sellafield Ltd

Memorandum

To:	Senior Construction Coordinator, Demolition Group	Date:	09th May 2023
		Pages:	8
From:	Environmental Specialist		
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Subject: **Habitat and Ecology Survey to support demolition of Offices/Changroom Facility (Tender Specification SP/GEN-DECOM/PROJ/00137)**

Habitat Survey

Introduction

This Habitat Survey has been conducted in support of the demolition of a complex of redundant buildings and interlinking walkways on Sellafield site.

The survey was conducted with a desktop study, that considered potentially impacted ecological sites as described and Applicable Legislation (Appendix 2) and a site visit to the defined demolition area (Appendix 1) on the 20th April 2023.

Site Description & Scope of Survey

The buildings to be demolished are a group of temporary structures and interlinking covered walkways, as follows: -

- The facility consists of a number of interlinked flat roof portacabins single story at either end with the middle two being double stacked. A single segregated Glasdon hut style unit sits to the north-west that housed a water tank and associated equipment/pipework.
- The structures were inspected externally (and internally where possible by viewing through windows doors) as the structures are classed unsafe for access due to water ingress. The structures were externally visually in a relatively good state of repair, though unoccupied at the time of survey having previously and been used as Offices and changeroom access into the main facility adjacent. All were constructed on steeply sloping ground. As the underneath and interspace between the double stacked portacabins had been opened for structural assessment, services identification and wiring pullback it was possible to observe underneath/between the buildings. None of the area below observed nor between levels showed evidence of significant chemical or oil contamination.
- The different components of the facility were linked to the west with a series of metal framed glass walkways on concrete base open at upper and lower edges to allow air passage. To access the upper levels of the central portacabins two steel open staircases were installed.

- The surrounding area to south, east and north is a mixture of sandy/gravelly ground, bordered by tarmac pavement and road. To the West side stands the Main building that formerly housed the site wheelabrator facility that the cluster of buildings served. The whole group of building are set on a steep slope falling east to west. The sloped area under the facilities is a mixture of concrete and soil/gravel with some buried services/drainage.
- The perimeter area to south-west of the cluster of building and around southern end where it is bare sandy soil shows evidence of rabbit warrens/digging and during visit a rabbit was observed in the scrub ground further to the north. The area around the buildings was largely cleared of any vegetation, showing signs that this had been done relatively recently.
- There was no stated future intention informed for land re-use at this time, though informed intent for the main facility directly to west, now cleared of the old wheelabrator is for it to be used as a construction store for future new build.
- This survey also supports Environmental requirements of SLP1.07.30, Section 1.2.3 and Remediation Hazard Screen Sheet.

Survey Findings Discussion

- There was no evidence of wildlife habitation, other than that by rabbits to south-west side, nor is the surrounding area considered a significant habitat potential as the area is scrub ground bounded by tarmac roads and gravel hardstanding/scrub ground exposed to the elements. Areas in adjacent compounds to the north have already been cleared.
- All buildings were generally all in good condition and appeared to be well sealed apart from interspace between the two storey sections, below the lower tier and where side panels at roof level had been removed for materials sampling/confirmation purposes.
- From external inspection and limited internal viewing through windows/doors carried out there was no evidence of wildlife intrusion found, nor in interspace that was fully viewable from the metal stairs or underneath lower tier that was viewable from an access hatch. The flat rooves makes them possible Gull nesting sites, but again viewed from higher ground at site 1 no evidence was present of any nesting/nesting materials and the rubberised style roof makes poor slippery surface for nesting. The locale offers many better and higher nesting sites on the surrounding Engineered Stores and Encapsulation plants. The exposed nature, and limited access overhangs also make the buildings unsuitable for Swift/Martin nesting. Again, there was no evidence present of current or previous nesting. There was no evidence from droppings that frequent attendance had been occurring and with demolition to commence in short timescale little chance of nesting occurring.
- There was no real open access points into the building being office style portacabins in exposed location by the sea they were well sealed, bar where the interspaces have now been opened to facilitate survey/utility pullback/removal, for bats nor obvious cavities. No evidence was present for roosting bats either from the external elevations or internal inspection of the interlinking walkways. Due to the interspace being now left open between the levels a further inspection needs to occur directly before demolition commences to confirm the interspace remains free of bats and other wildlife.
- Aside from gulls on the adjacent Engineered stores/Encapsulation plants, there was no observed evidence of bird activity in the direct area or overhead during the site visit. If demolition occurs in the breeding season, then the rooves should be checked for nesting birds prior to demolition starting.

- Limited inspection underneath showed no evidence of small mammal or reptile incursion, though the gaps under the south-western corner offer opportunity and small services penetrations offer opportunity for access. The underside of the facilities were largely bare concrete or gravelled ground and offer little in way of enticements for access and nesting. However, as the facilities are now cold and dark, with little access occurring, early demolition is advised.
- Any gravelled areas could provide suitable habitat for ground nesting birds, largely Oystercatchers (though no evidence was found) – however, again this is highly unlikely due to the distance from shoreline, exposed conditions, and proximity to both the buildings and used accompanying roads.
- The immediate surrounding areas are primarily tarmacked roads with gravelled edges to south and east. to north scrub embankment rising to a further scrub plateau. To West the Main Facility formerly served by the office/changeroom being demolished, with a small strip of sandy gravel embankment to southwest corner. No evidence exists of rodent occupancy, just couple of rabbit scrapings and one burrow. Such areas, bar that described offer limited opportunity for small mammals and reptiles to access and no evidence of presence or boundary incursion was evident.

Proposed Demolition Methodology Impacts

- The portacabin buildings are standard insulated construction with rubberised rooves and being post year 2000 manufacture have been confirmed by manufacturer as asbestos free, so there is limited potential for Asbestos or other restricted/controlled materials to be present. As there was no access to the facility internally it was not possible to confirm whether there was any chemicals or other chemical waste present, though a closed cleaners chemicals cabinet and fire extinguishers were visible. Disposal of any found materials/chemicals is completed as part of soft strip and plans in place for removal down appropriate waste routes prior to demolition commencing. Metals will be recycled and there is little risk of harmful dusts or materials spread anticipated from demolition that might transport to any adjacent habitats, particularly as the prevailing wind direction is largely away from the nearest areas of ecological interest. Generated waste and metals for recycling will be placed into skips/iso-containers and managed/removed promptly.
- Limited opportunity for loss of oils or hydraulic fluids exists from demolition equipment, however spill kit deployment during operations and appropriate response are part of Demolition Operatives training. There are no watercourses within the immediate surroundings excepting surface water drains on the surrounding roads.
- There are known instances of bird of prey nesting in the Calder Hall, Encapsulation Stores, and woodlands areas further to north and west. However, these are remote to this compound and it and the areas surrounding offer limited opportunity for any prey, meaning any hunting incursion into the direct area of demolition is extremely unlikely.
- The Proposed demolition methodology therefore presents little risk, if any to any incursive wildlife or adjacent habitats or areas of ecological interest.
- Demolition operatives are briefed expected to know what to do if they encounter any wildlife during their work and this is reinforced with an appropriate toolbox talk prior to demolition starting.

Adjacent Sites of Ecological Interest

The nearest area of any ecological value is an area of high grass embankment/dune to the South which rises to some drainage ponds ~210m away and then Newmill Beck ~229m (beyond the site boundary). This mound includes some small shrubs and gorse bushes. Beyond in this direction is farmland and Seascale Golf Course found at ~300m beyond the site boundary.

The centre of the demolition site is ~518m from the River Calder and ~856m from the confluence with the River Ehen. These are the nearest areas of natural/semi natural habitat to the proposed demolition site and there is no connectivity with other gravel compounds, tarmac and numerous structures providing significant barriers to dispersal for terrestrial animals. With exception of the previously mentioned rivers there are no areas of fresh water within 1000m of the proposed demolition site.

Designated Sites

Designated statutory sites within 5km of the Sellafield Site (Ref. Magic Map application https://magic.defra.gov.uk/MagicMap.aspx)

	Approximate Nearest Site Boundary (km)	Designations
Hallsenna Moor	4.2	NNR, SSSI
Low Church Moss	2.7	SSSI
Drigg Coast	3.2	SSSI, SAC
Silver Tarn, Hollas and Harnsey Mosses	4.7	SSSI
Cumbria Coast	0.5	MCZ
Lake District	2.9	National Park

There are no sites with the following designations within 5km:

- Area of Outstanding Natural Beauty (AONB)
- Local Nature Reserve (LNR)
- Special Protection Area (SPA)
- Biosphere Reserves
- Marine Nature Reserves
- Ramsar

The proposed demolitions will not impact on any designated sites.

There is a known colony of Natterjack toads southward, near the Sellafield Site boundary, however this is over 725m meters away from the demolition site and there is a low level of connectivity due to roads, gravel hardstanding, embankments and other structural barriers limiting toad movement. The demolition site itself is poor habitat for Natterjack toads.

Conclusion

Based on the above, no ecological constraints are evident to prevent the demolition of the buildings. Though there is potential for wildlife incursion, any potential impacts can be easily mitigated through good construction management, and wildlife awareness. Due to the panels removed for survey/utility pullback/removal and other gaps/penetrations, early demolition should be sought and limits the validity of this assessment requiring a further walkround immediately prior to demolition commencement.

Recommendations

It is recommended the following mitigations are employed to ensure the risk of impacts on wildlife is as low as reasonably practicable:

- Consider scheduling the work to take place as early as achievable and within the restriction given as it is now nesting season 01st March- 31st July.

- Operatives working on the demolition are to be provided with relevant toolbox talks regarding identifying wildlife and actions to be taken on discovery of animals on the site during works. The toolbox talks are to be delivered before works commence and will focus on bats, nesting birds and reptiles.

- It is recommended that operators are briefed on recognising evidence of the presence of bats. If evidence of bats is observed during demolition, then demolition should not proceed without further investigation and a detailed survey; an ecologically competent person should be contacted to assess the situation.

- As far as practicable restrict work, and laydown of materials and waste, to areas with hard surfaces (e.g. paving, poured concrete and tarmac). Do not leave any mounds of spoil that could be used a refugia or any materials that could be utilised as nesting material.

Notes:

1. Regardless of the time of year, if nesting birds are noted on site an ecologically competent person should be contacted to assess the situation. Works will be delayed in the vicinity of any occupied nest until the young birds have fledged.
2. If required for external publication will need to be redacted or shortform version be supplied.

Environmental Specialist - Remediation
09th May 2023

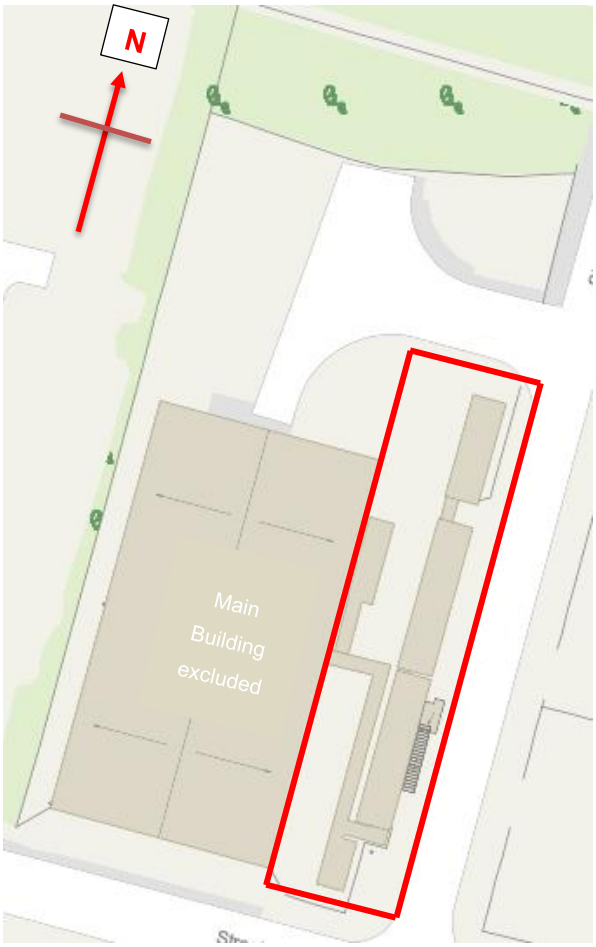
Copies:
Environmental Specialist – Strategy & Development
EH&S Manager – Remediation Beta/Gamma & Alpha
Senior Safety Advisor – Remediation Beta/Gamma
File & EHS Linkmap

Appendix 1: Demolition Area Layout Map

Map Key

	Extent of Habitat Survey[1]		Amenity Grassland
	Roads (Tarmac and concrete)		Hedgrow/Shrubs
	Buildings (existing)		Bare ground- gravel / hardcore
	Other hard surfaces including footpaths		Proposed Demolition buildings
	Watercourses		Drainage (Foul)

Map



[1] This is not the same as the proposed site plan.

Appendix 2: Relevant Legislation

Bats

Bats and their roosts are protected in England and Wales, the relevant legislation is the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010). It is an offence to:

- Deliberately capture, injure, or kill a bat
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost

Nesting Birds

The primary legislation for Protection of nesting birds in England and Wales is the Wildlife and Countryside Act 1981 (As amended) Part 1, in that it is an offence to:

- Intentionally kill, injure, or take any wild bird.
- Intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

The nesting season is officially 1st March to 31st July; however, it may extend beyond those dates.

Reptiles

Reptiles, including grass snakes, adders, slow worms, and common lizards, are protected from killing and injury under the Wildlife and Countryside Act 1981.

Small Mammals/rodents

Water voles are protected under the Wildlife and Countryside Act 1981. It is an offence to intentionally: kill, injure, or take them, possess, or control them (alive or dead). This includes disturbance or destruction of burrows or habitat. Due to lack of proximity to watercourses, it is unlikely any presence would be found.

Wildlife and Countryside Act Penalties

Penalties that can be imposed for criminal offences contrary to the Wildlife and Countryside Act 1981 (as amended) are an unlimited fine, up to six months imprisonment or both. Similar penalties are set out under the Conservation of Habitats and Species Regulations (2017).