

# GOFER BULKING STATION – IMPROVEMENT WORKS WASTE PLANNING ASSESSMENT

# Table of Contents

Introduction2
Relevant planning history2
Waste Planning Assessment
Environmental Permitting3
Scope of works4
Development
Location and sensitive receptors5
Site Location6
Operating Hours7
Environmental Impacts7
Flooding7
Waste types and quantity7
Design, layout, buildings, and plant10
Design, Layout and Buildings10
Mobile Plant and Equipment11
Amenity and Nuisance11
Ecology11
Air Pollution11
Transport12
Waste Processing12
Appendix A – Existing Site Layout12
Appendix B – Proposed Site Layout

## Introduction

Gofer Bulking Station is a Local Authority Waste Treatment and Transfer Facility located in Abergele, Conwy. The site was constructed in 2006 then further developed in 2011. The site receives kerbside collected recycling material from domestic properties within the Conwy County area (~ 58,500 properties) and from Conwy County Borough Council's (CCBC) commercial recycling collection service.

The proposed improvement works aim to upgrade and increase storage capacity for deposited and prepared recyclable material and will support CCBC to meet current Fire Prevention and Mitigation Plan (FPMP) conditions as set by the regulator; Natural Resources Wales (NRW).

This Waste Planning Assessment has been produced in accordance with TAN 21. The information provided within this Waste Planning Assessment reflects the nature, size, and scale of the proposed development. It should be noted that this is an existing waste transfer facility.

For the purposes of this Waste Planning Assessment, both the use of external bays and storage areas will be considered as well as the bays and processes undertaken in the main building. There will be no change in employee numbers resulting from the improvement works. Existing operational staff, plant and management will continue to operate the site.

This Waste Planning Assessment supports the planning pre-application process for the construction of the improvement works. Please see <u>Scope of works</u> for more detail.

## Relevant planning history

Since its construction in 2006, Gofer Bulking Station has received further planning approval for the following:

- 0/29617 Use of land for bulking dry recycling station including erection of maintenance shed, offices, storage areas, wash areas and parking facilities. Approved in 2005.
- 0/30252 Use of land for building dry recycling station including erection of maintenance shed, offices, storage areas, wash areas, siting of 2 no. portacabins and construction of parking facilities and landscaping. Approved in 2005.
- 0/32379 Removal of planning condition 3(ii) and 5 of planning application 0/30252 in relation to noise attenuation fencing. Approved in 2007.
- 0/35776 Variation of condition no. 12 and 13 granted under planning permission reference 0/30252 to allow for amended operating hours and to include food waste collection and building. Approved in 2009.
- 0/37433 'Extension of existing bulking station building, construction of extended hardstanding / external storage area and installation of portacabin' approved with conditions on 19/11/2011.

## Waste Planning Assessment

Towards Zero Waste (TZW) is the overarching waste strategy document for Wales. TZW is supported by a suite of Sector Plans and guidance documents which comprise the statutory waste management plan for Wales. The Collections, Infrastructure and Markets Sector Plan (CIMs) is the most relevant in terms of the proposed improvement works and its contribution to delivering TZW in Wales.

TZW is a long-term framework for resource efficiency and waste management between now and 2050. The framework looks to address the most significant and new challenges facing Wales, namely;

- Sustainability ensuring that waste management in Wales contributes towards and enhances the economic, social, and environmental welling of people and communities
- Ecological footprint the need to measure, monitor and reduce the level of material and resource consumption in Wales
- Climate change ensuring there is a reduction in greenhouse gas emissions produced from waste
- Security of resources ensuring that Wales have enough resources, at an affordable price, to sustain the Welsh economy and way of life.

The Collections, Infrastructure and Markets Sector Plan (CIMS Plan) was published on 10 July 2012 and is particularly relevant for the land use planning process. The CIMS Plan updates the picture of infrastructure requirements, in relation to technology choices and the best overall environmental option for specific waste materials. The waste assessments in the CIMS Plan establish the need for residual waste treatment and disposal, as well as describing the move towards higher levels of re-use and recycling.

The plan is aimed primarily at those who collect and manage waste – including Local Authorities. The aim is to facilitate delivery of the most effective, efficient, and sustainable collection systems.

The sector plan focuses on a number of 'priority materials' – materials arising from all sectors specifically referred to in the Waste Framework Directive and/or which have the highest ecological footprint associated with them, and for which appropriate management is of paramount importance and ensures the collection of high-quality materials.

<u>Microsoft Word - CL-01-12 Planning and Waste - Interim Planning Position.doc (gov.wales)</u> <u>Overview | Collection Blueprint (collectionsblueprint.wales)</u>

#### **Environmental Permitting**

Under current operations, the site is operated under the following permitting regime:

Regulator	Permit/Licence/Exemption	Permit/Licence Number	Award date
Natural Resources Wales	Environmental Permit	EPR/HP3591EZ	15.03.2011
Natural Resources Wales	Hazardous Waste Registration	CAA585	03.08.2023
Natural Resources Wales	Exemption T4	NRW-WME089470	26.07.2023
Natural Resources Wales	Exemption S2	NRW-WME089470	26.07.2023

Table 1 – Permitting

The redeveloped facility will be designed in order to remove the requirement for the T4 and S2 exemptions listed above. The site will be regulated under one Environmental Permit.

## Scope of works

The proposed works aim to upgrade and increase storage capacity for deposited and prepared recyclable material and will support CCBC to meet current FPMP conditions as set by the regulator; NRW.

To achieve compliance with FPMP guidance, the Waste and Resources Action Programme (WRAP) have undertaken an assessment of the existing facility to identify the infrastructure and engineering changes required. All requirements below form part of the proposed improvement works.

Requirement	Quantity	Specification Assumptions
Kerbing (including installation)	150m	HB2 125 x 255 kerb on concrete bed and haunch; laid straight.
Firewalls	365m	4m high; 2-hour fire resisting; FP McCann pre-cast concrete cantilevered wall (or similar); push wall.
Baled and external material coverage (steel structure with roof)	1,310m²	6-8m high; steel framed building; economical cladding to roof and walls; excludes surfacing (see item below).
Surfacing upgrades to building and yard	5,384m²	Remove existing gravel/loose ground; replace with new surfacing; 200 thick reinforced concrete; 300 thick stabilised material; geotextile Terram 1000.
Foul drainage storage tank (including installation)	1 unit	2,800 litre Klargester septic tank.
Foul drainage system for waste storage areas	120m	150 diameter pipes within trench circa 1.5m deep.
Grease separator	1 unit	1,000 litre ACO Q-Cepter oil bypass separator.
Isolation Valves (est. 2 – one surface, one foul)	2 units	150 or 225 diameter Toggleblok Pollution Containment Device (PCO); automatic; within chamber; solar powered; connected into fire alarm system.
Firewater supply tank	1 unit x 135,668 Litres	SPEL Products Series 500 unit; 144,500 litres; 15.70m long x 3.60m diameter; bed and surrounded in concrete underground or on supporting slab above ground.

Table 2 – FPMP Requirements

The improvement works will also include the construction of covered material storage bays to the north and west of the site, an extension to the existing building to house a materials sampling area\* and relocation of the vehicle wash. Please refer to <u>Appendix B</u> for the proposed site layout.

\*Input and output material is subject to regular sampling in line with Schedule 9a of the Environmental Permitting (England and Wales) (Amendment) Regulations 2014. The Materials Recovery Facilities (MRFs) Sorting Guide | WRAP

The improvement works will have the following benefits for the authority:

- Site compliant with current and future NRW Fire Prevention and Mitigation strategy
- Increased storage capacity for deposited and processed materials
- Covered storage capacity for processed materials leading to increased income generated by material sale
- Site contributes positively to social and economic development in North Wales

Section 4.60 of TAN21 notes that Waste Facilities, such as the proposed redevelopment of Gofer Bulking Station, are of *"significant importance as they serve to manage the flow of waste more effectively and can reduce overall reliance upon landfill as increasingly the capture of recyclable materials takes place at these facilities. Sited carefully, they can enhance the area in which they are sited and reduce costs to waste carriers by providing alternative markets for targeted bulk materials rather than to deposit small volumes continuously to landfill."* 

## Development

The proposed development provides CCBC with a future proof solution to provide maximum recovery of recyclable materials arising in the Local Authority area.

#### Location and sensitive receptors

Gofer Bulking Station is located off Rhuddlan Road, Abergele, Conwy, North Wales, LL22 9SE (Grid reference number: SH 97020 77509). The land surrounding the site is principally low-lying agricultural land, flat open countryside, and a network of drainage ditches. The A55 lies directly east of the depot.

The site is located alongside two commercial waste facilities:

- Gofer Household Recycling Centre (HRC) which is operated by a waste contractor on behalf of the Council.
- A private Waste Transfer Station and skip hire company is located directly to the north of the site namely Thorncliffe.

The location of the proposed facility meets the location requirements for waste management facilities as specified in section 3.27 of TAN21 as follows:

- there are existing planning permissions/environmental permits;
- the cumulative effect of waste management facilities and other development on sensitive environmental receptors is acceptable.

• the cumulative effect of waste management facilities and other development on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential is acceptable.

## Site Location



Image 1 – Site Location.

## **Operating Hours**

There will be no changes to site operating hours following the improvement works.

Existing site operating hours are as in table 3 below:

Day	Time
Monday – Friday (Excluding Christmas Day & New Years' Day)	06:00 - 17:00
Saturday	06:00 - 17:00

Table 3 – Operating hours

It is a requirement for the site to operate on a Saturday to cover recycling collections on Bank Holidays throughout the year. In Conwy, waste and recycling is not collected on a bank holiday and collections are moved to Saturdays.

## **Environmental Impacts**

There is no requirement for an Environmental Risk Assessment for this development as the site is already an operating Waste Transfer Station.

## Flooding

The site is located within 'C1 Zone' Welsh Government's Development Advice Maps (Flood Risk Zones). Defined by NRW as 'Areas of floodplain which are developed and served by significant infrastructure, including flood defences.

A Flood Consequence Assessment was undertaken in January 2024 by Unda Consulting LTD. Unda Consulting LTD consider the proposed works to be suitable in flood risk terms.

## Waste types and quantity

For illustrative purposes, actual material tonnage data for 2022/23 has been used as detailed in table 4 below:

Waste Type	Annual Tonnage (2022/23)	Material Source	Storage Requirements	End Destination
Mixed Paper	1907	Kerbside / Trade Collections	Storage loose in waste reception bay pending transfer	Palm Paper LTD Saddlebow Paper Mill Former British Sugar Site, Poplar Avenue, Kings Lynn Norfolk, PE34 3AL Permit Number: EPR/FP3132UE
Cardboard	2830	Kerbside / Trade Collections	Stored loose in waste reception bay pending treatment Baled on site	Smurfit Kappa Smurfit Kappa, Philips Road, Whitebirk Industrial Estate, Blackburn, England, BB1 5SW Permit Exemption: HF0103XD
Mixed Plastic	1525	Kerbside / Trade Collections	Stored loose in waste reception bay pending treatment Material accepted as a mixed load (Plastic, Cans & Tetrapak) and separated on site Baled on site	JPLAS Berristow Lane, South Normanton, Derbyshire, DE55 2DT Permit Number: EPR/DP3391LC

Steel Cans	421	Kerbside / Trade Collections	Stored loose in waste reception bay pending treatment Material accepted as a mixed load (Plastic, Cans & Tetrapak) and separated on site Baled on site	AMG Resources LTD Nevilles Dock, Llanelli, SA15 2HD Tata Steel UK, Port Talbot Steel Works, Port Talbot, SA132NG. Permit Number: EPR/BL7108IM
Aluminium Cans	241	Kerbside / Trade Collections	Stored loose in waste reception bay pending treatment Material accepted as a mixed load (Plastic, Cans & Tetrapak) and separated on site Baled on site	EMR Rochdale, Uncouth Road, Milnrow, Rochdale, Lancashire, OL16 3DD. Permit Number: EPR/XP3692CG
Tetrapak	10	Kerbside / Trade Collections	Stored loose in waste reception bay pending treatment Material accepted as a mixed load (Plastic, Cans & Tetrapak) and separated on site Baled on site	Sonoco Sonoco Cores and Paper LTD Holywell Green Stainland, Halifax, HX4 9PY Permit Number: EPR/LP3934SE

Glass	4052	Kerbside / Trade Collections	Stored loose in waste reception bay pending transfer	Sibelco Salmon Pastures Waste Transfer Station, Attercliffe Road, Sheffield, South Yorkshire, S4 7WT. Permit Number: EPR/EP3190VW
Food Waste	5419	Kerbside / Trade Collections	Stored in sealed 35cu yard skips pending transfer	Biogen Waen LTD Waen Anaerobic Digestion Site, Hollywell Road, St Asaph Denbighshire, LL17 0DS Permit Number: EPR/DP3735NP
Household Batteries	10	Kerbside Collections	Storage in 1m <sup>2</sup> pallet boxes pending transfer	ERP CCBC is part of a National WEEE compliance scheme. Post-Consumer batteries are collected by ERP (European Recycling Platform)

Table 4 – Annual waste throughput, storage requirements and end destination detail by waste type

## Design, layout, buildings, and plant

## Design, Layout and Buildings

The existing site layout is shown in drawing GWS-TACP-PS-XX-DR-A-7001 which be found in <u>Appendix A</u> to this report.

The proposed site layout is shown in drawing GWS-TACP-PS-XX-DR-A-7100 which can be found in <u>Appendix B</u> to this report.

All waste types will be managed in line with the site's operating techniques document and in compliance with its Environmental permit to mitigate any risk to the surrounding environment.

The existing waste reception building will be extended to accommodate a materials sampling area which will be constructed as a lean-to with Kingspan composite wall & roof build-up to match existing, approx. 7m high.

New out-buildings are proposed to house additional waste reception and storage bays, a vehicle wash and fire-water tank to bring the existing facility up to current legislation *(Refer to <u>Scope of works</u>)* The new bays are constructed using concrete panels with metal cladding roof structure approx. 8-9m in height.





All waste types will be accepted, stored, treated, and transferred in line with <u>Table 4 –</u> <u>Annual waste throughput</u>, storage requirements and end destination detail by waste type

## Mobile Plant and Equipment

Mobile plant and equipment required for site operations is as per Table 5 - Plant &Machinery. Table 5 details the current plant and machinery used on site, all of which will continue to be used on site with no changes to plant, and machinery anticipated.

Description	Activity
Case Loading Shovel 721.G	Loading, transfer of waste
JCB Teletruck with Rotating Forks	Loading, transfer of waste
JCB Teletruck with clamp	Loading, transfer of waste
Takeuichi 8-ton mini excavator TB290	Loading, transfer of waste
Steel can Baler (CRB)	Briquette baling of steel
Automatic Baler x 3	Mill size baling of Aluminium, Mixed Plastic, Carboard and Tetrapak

Table 5 – Plant & Machinery

All plant, equipment and machinery are subject to maintenance and service agreements in line with manufacturers guidance.

## Amenity and Nuisance

Paragraph 4.61 of TAN21 states "Transfer stations can create issues with odour, noise, dust, vermin and visual amenity where storage of waste occurs in the open."

Environmental impacts have been previously considered to address the risk from noise, odour, dust, litter, pests and vermin, fire and potential fugitive emissions (solid, liquid and gaseous emissions) to land, air and water. As the site is fully operational, control measures have been put in place to mitigate the environmental risks posed by site operations.

#### Ecology

Arbtech Consulting LTD have undertaken an extensive ecology assessment to consider protected species and the ecological impact of the proposed development.

#### Air Pollution

There will be no significant emissions to the atmosphere from both internal and external site activities.

## Transport

There is no requirement for a Transport Assessment for this development as the site is already an operating Waste Transfer Station and no changes to current vehicle numbers and volumes entering/exiting the site are anticipated.

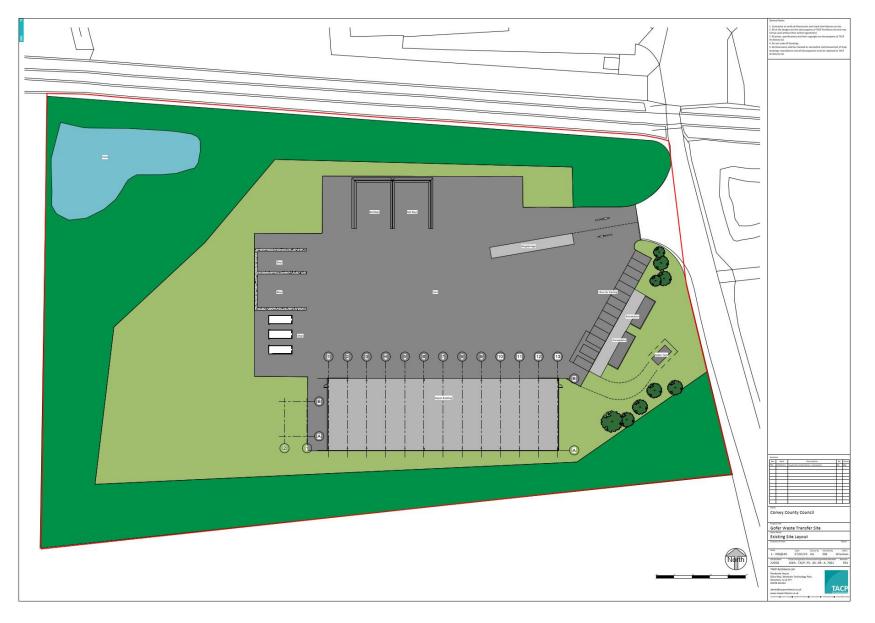
### Waste Processing

The treatment (baling) of steel, plastic, aluminium, tetrapak and cardboard will be carried out inside the main building. Once baled, the material will be moved to covered storage bays located to the north and west of the site pending transfer.

Paper and glass will be stored loose in covered waste reception bays pending transfer from site.

Food waste is tipped directly into sealed skips inside the main building pending transfer from site.

# Appendix A – Existing Site Layout



# Appendix B – Proposed Site Layout

