



Waste Planning Assessment

Units 29 & 29A Pembroke Dock - Waste Planning Assessment

Introduction

For the purposes of this Waste Planning Assessment, Units 29 and 29A will be considered as one given the units are internally and externally joined and that the units will be used in combination to manage waste. The proposed development will not alter in any way the external fabric of these fully contained units and no additional lighting is proposed. In addition, the proposed use will include usual daytime operating hours in line with the adjacent units.

The proposed development will support Pembrokeshire County Council (PCC) to make a major service in November 2019 to move from comingled collections to kerbside sort collections for its 65K households. In-order to facilitate this service change, a strategically placed Waste Transfer Station is required to allow the authority to bulk and/or bale source segregated waste streams, AHP (Absorbent Hygiene Products), DMR (dry mixed recycle) and residual waste for onward transportation for recovery or disposal elsewhere. This facility will act as an interim facility supporting the change of waste collection scheme for circa 3 years, until PCC are able to secure and develop a long-term facility.

This Waste Planning Assessment supports the planning pre-application process for a change of use to a Waste Transfer Station (WTS), also termed a collection facility in accordance with section 4.57 of Technical Advice Note (TAN) 21¹. Units 29 and 29A were constructed by the MOD and leased by Pembroke Port for marine based fabrication, storage and heavy industrial use. The units are currently derelict although in a good state of repair.

This Waste Planning Assessment has been produced in accordance with TAN 21 and the guidance provided in Annex B. The information provided within this Waste Planning Assessment reflects the nature, size and scale of the proposed development. It should be noted that the proposed develop is an extension of a waste bulking and transfer operation which is currently occurring in an adjacent unit, Unit 41. For Environmental Permitting Purposes Units 41, 29 and 29A will be considered as one site and regulated under one permit.

¹ *Technical Advice Note 21, Waste, February 2014, Welsh Government.*

The impacts of the site from an environmental perspective have been considered in an Environmental Risk Assessment (ERA) which has been produced to support both the planning and Environmental Permitting application processes. The ERA assesses the potential environmental risks from the entire waste site (units 41, 29 & 29A) and assesses potential risks and impacts from;

- Noise
- Odour
- Dust
- Emissions of water from stockpiles and the site surface
- Birds, vermin and insects
- Mud & litter
- Spillages and leakages
- Fire
- Vandalism and security
- Flooding

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 other documents which comprise the statutory waste management plan for Wales. The CIMs (Collections, Infrastructure and Markets Sector Plan)² is the most relevant in terms of the proposed develop 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 CIMs Plan covers the collection and subsequent management of all wastes in Wales arising from all sectors (public and private), focusing on priority materials identified in 'Towards Zero Waste' and in relevant waste Directives (including the Waste Framework Directive in respect of, amongst other requirements, separate collection for high quality recycling). It also includes coverage of markets for dry recyclate (including packaging), compost and anaerobic digestion (AD) digestate, and the collection and management of

² <https://gweddill.gov.wales/docs/desh/publications/120713wastecimsectorplanen.pdf>

residual waste - the waste that is left after recycling. The plan is aimed primarily at those who collect and manage waste – including reprocessors, the waste industry, regulators, local authorities, the social economy and other bodies. The aim is to facilitate delivery of the most effective, efficient and sustainable collection systems.

This sector plan focuses on a number of 'priority materials' – materials within the waste stream from all sectors specifically referred to by the Waste Framework Directive and/or which have the highest ecological footprint associated with them, and for which appropriate management is of paramount importance: food, paper, card, metal, plastics and glass. The key issues for dry recyclates are extending collections for all wastes with a particular focus on plastics and card/paper and ensuring the collection of high-quality paper, plastic bottles and glass. In terms of residual waste and elements of residual waste such as AHPs, the CIMs plan looks to reduce reliance on landfill and increase the treatment of residual waste through energy efficient EfW.

The Welsh Government published the '*Collections Blueprint - For affordable and sustainable local authority collection services for recyclable, compostable and residual waste*'³ in March 2011. The Collections Blueprint forms part of the overarching Wales waste strategy document, 'Towards Zero Waste', and the Municipal Sector Plan, and supports the implementation of several Welsh Government strategic commitments. The Collections Blueprint describes the Welsh Government's recommended service profile for the collection of waste from households, including the following central policies:

- weekly separate collection of dry recyclables via 'kerbside sort', with material being collected separately in boxes and/or in re-usable sacks, with two or more boxes provided per household, and recyclables being sorted into separate compartments on the collection vehicle by the collection staff;
- weekly separate collection of food waste;
- the use of modern lightweight, multi-compartment vehicles for a single pass collection of dry recyclables and food waste; and
- fortnightly collection of residual waste, from collections with reduced residual waste capacity, where 'no side waste' policies are enforced.

The proposed extension of waste activities from Unit 41 to encompass Units 29 and 29A is paramount for PCC to be able to adopt and deliver a service change in line with Welsh Government's collections blueprint, to reduce reliance on landfill and divert waste to EfW, to ensure PCC meets its statutory recycling targets and to ensure that PCC achieve the fiscal benefits from delivering high quality recyclate to market. In order for an authority to deliver Welsh Government's aspirations as laid out in TZW and the CIMs Plan, an authority must have at least 1 WTS where materials can be deposited, bulked and baled for onward transportation for recycling or recovery elsewhere.

The current facility and proposed extended facility, will as a result of a collections service change from comingled collection to kerbside sort collections;

³ <https://collectionsblueprint.wales/>

- Deliver high quality source segregated News and Pams (paper), hardmixed paper (card), mixed container glass, food cartons, mixed plastics, steel can and aluminium cans⁴ to markets in Wales or the wider UK.
- Result in a reduction in carbon impacts and green house gas emissions as high-quality source segregated materials can be commonly placed directly with UK reproprocessors and therefore removing the reliance on less sustainable markets outside the UK and EU and remove the need for energy intensive sorting at MRFs and the increased transportation associated with this.
- Result in reduced carbon and greenhouse gas impacts through the bulking of residual waste which will be sent to a high efficiency energy from waste plant in Cardiff. In addition, AHPs which would have ordinarily gone to landfill in the residual waste, will be bulked for recycling at a facility in Ammanford. Sending residual waste to EfW as opposed to landfill will allow for the recovery of a metallic fraction and IBA (Incinerator Bottom Ash) from the waste.
- Allow for the separate collection, storage and therefore recycling of small WEEE (Waste Electrical and Electronic Equipment), household batteries and textiles. Without adopting the Blueprint and having the proposed facility to bulk these materials, they would have been mainly landfilled. The CIMs Plan states *"there is considerable scope to increase the amount of WEEE collected for treatment, reuse and preparation for re-use"* the separate collection of WEEE and batteries proposed by PCC will contribute this aspiration as well as to capture of precious, rare earth and strategic metals, therefore reducing reliance on energy and water intensive extraction from ore. In addition not only do the types of metals contained within WEEE have a high monetary value, extraction of them is essential for global resource management.
- Further strengthen collaborative working with neighbouring authorities through the combined management and recovery of food waste. This also meets the Welsh Government's aspiration of collaboration between local authorities and planning authorities with regards to waste management, as mentioned in Paragraph 3.4 of TAN21.
- Contribute positively to social and economic development in Wales through job creation and a reduction in the use of virgin materials where waste is reprocessed in Wales.

Although the current and proposed development is for bulking predominately household material, PCC do also collect single stream food and glass from small business in Pembrokeshire which provides a locally based service supporting the local communities and local economic development.

The location of the existing facility and proposed facility meets the location requirements for waste management facilities as specified in section 3.27 of TAN21. The proposed facility will be located in an existing industrial area, Units 29 and 29A are currently derelict and hence utilising them provide an opportunity to enhance the area, the neighbouring site is already

⁴ *Mixed plastics, steel cans, aluminium cans and food cartons will be baled at the site and sent elsewhere for sorting into constituent streams. These streams will be sold to market as single stream materials.*

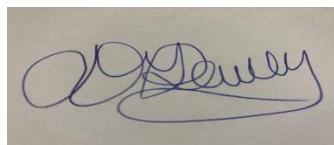
occupied by a PCC waste activity which this proposal is looking to extend and the nature of the existing and proposed neighbouring land uses facilitates the location of the proposed development. In addition, the site infrastructure; transport infrastructure and road links, electricity supply, connection to sewerage network, the site already being covered by existing planning uses and an Environmental Permit combined with an ERA which shows the site will not have any adverse environmental quality impacts on the location or residents, makes this the preferred location.

Section 4.60 of TAN21 notes that WTSs, such as that proposed, 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.* As stated above the proposed facility already does and will continue to effectively manage the flow of materials mainly household but also some commercial co-collected waste to the most cost effective and least environmentally impactful end destinations.

Declaration

This statement sets out how the waste hierarchy has been considered in developing the proposals currently forming this planning application.

Signed: Debbie Palfrey, CCP, WRAP Cymru



Date: 12th June 2019

Development

Timescales

The proposed development which is an extension to PCCs current waste operations in Unit 41, provides PCC with an interim option whilst a longer term and permanent site is identified for all PCCs waste activities and waste vehicles. The site is therefore likely to be in operation for circa 3 years.

Table 1 below provides a summary of the proposed operating hours. It should be noted that these hours are the same as those currently employed in Unit 41.

Table 1 – Proposed operational hours

| Day | Time |
|---------------|---------------|
| Monday-Friday | 07:30 – 19:30 |

| | |
|------------------------|---------------|
| Saturday | 07:30 – 19:30 |
| Sunday & Bank Holidays | 09:00 – 16:00 |

Machinery will be operating within these hours Monday - Friday and on Saturday. The site is required to remain open on some but not all Sundays and Bank Holidays, to allow for deliveries of incoming waste and the removal of waste streams. Whilst the direct delivery of most of the waste will be during opening hours on Monday - Saturday, local authority collection services may work through Bank Holidays, or accommodate for Bank Holidays by collecting waste on Sundays. Therefore, access may be required to the proposed development on Sundays and Bank Holidays, but deliveries on these days are likely to be occur occasionally, rather than frequently.

Types and quantities of waste to be managed

The combined permitted tonnage for Units 41, 29 and 29A will be 74,000 tonnes per annum, however the operating tonnage will be significantly lower at around 50,000 tonnes per annum as shown in table 2 below. The site will bulk and/or bale non-hazardous source segregated residual, source segregated dry recyclate, AHP, dry mixed recyclate, glass, food, textile and small WEEE waste only. No treatment of waste will occur at the site and with the exception of a glass skip allowing 2 or 3 tips of glass per day, there is will be no external management or storage of waste. All waste will be dealt with within designated bays within the units.

Table 2 – Annual waste throughput by waste type, place of storage and end destinations

| Waste Type | Annual tonnage (tonnes) | Place of storage | End Destination* |
|--|--------------------------------|---|---|
| Mixed cans, plastics & food cartons | 2300 | Unit 41 with option of Unit 29A | Intermediary sorting in the UK |
| Paper (News & Pams) | 4500 | Unit 41 | UK paper mill |
| Card (Hard mixed card) | 2400 | Unit 41 | UK or EU board mill |
| OCC from HWRCs | 531 | Unit 41 | UK or EU board mill |
| Food (household & commercial) | 6400 | Unit 41 | Agrivert, Stormy Down until November 2027 |
| Glass (mixed container glass) | 4380 | Mainly within Unit 41. 2-3 load tipped directly into an external skip daily | Recresco Cwmbran, this contract is currently under review |
| Residual Waste (kerbside, HWRC & commercial) | 26,107 | Unit 29 | Viridor, Trident Park until March 2027 |
| AHPs | 500 | Unit 29A | Currently subject to negotiations. |

| | | | |
|--------------------------------------|------|---------|---------------------------------------|
| Commercial DMR (Dry mixed recyclate) | 2476 | Unit 29 | AJ Recycling Ltd until September 2020 |
| Small WEEE & batteries | <50 | Unit 41 | Currently subject to negotiations. |
| Textiles | <100 | Unit 41 | Currently subject to negotiations. |

* PCC are currently engaged with a third party broker who will source markets for all dry recyclates. PCC will negotiate a contract for AHP, small WEEE, batteries and textiles recycling.

Design, layout, buildings and plant

The proposed site layout is shown in drawing 29_29A -' submitted with the application. Unit 29 nor 29A will be used to treat waste, only for the bulking of material and hence other than a dedicated 'dirty' loading shovel, no machinery will be located within unit 29 or 29A.

The processes involved within the proposed development are as follows;

- Residual waste will be delivered to the site in RCVs (Refuse Collection Vehicles). The residual waste will be tipped directly into one of the designated bays. The residual waste will then be loaded into Walking Floor trailers for onward movement to Viridor's EfW facility in Cardiff for energy recovery.
- DMR (Dry Mixed Recyclate) will be delivered to the site bagged in RCVs. The DMR will be tipped directly into the designated bay. The DMR will then be loaded into Walking Floor or Ejector trailers for onward movement for sorting at a UK Materials Recycling Facility currently CWM Environmental in Carmarthen.
- AHPs will be delivered to the site bagged and tipped in the designated bay. Within one hour of tipping, the AHPs will be moved via loading shovel into a designated fully sealed skip. Within 72 hours the skip will be moved from site and the AHPs sent for Recycling in Wales.
- During emergency situations, Unit 29A has two bays which can be used to store either baled card or baled mixed cans and plastics which ordinarily would be stored in Unit 41. In the event these bays are utilised, a fork lift truck with bale clamps will be used to transport bales to and from unit 29A.

Amenity and Nuisance

The impacts of the site from an environmental perspective have been considered in the Environmental Risk Assessment (ERA) which accompanies this application. This ERA assesses the risk from noise, odour, dust, litter, pests and vermin, fire and potential solid, liquid and gaseous emission to land, air and water.

The buildings included in this application were visited by Trevor Theobald Pembrokeshire County Council Ecologist on 7th June 2019 and the following observations were made.

"The buildings have been subject to recent industrial use (including the use of paint & solvents) and both had skylights that give sufficient illumination to not make the building attractive to bats as a day roost.

Several Feral Pigeon corpses were noted during the site visit indicating the difficulty in exiting the structure.

A scoping opinion 18/0332/SO for multiple sites within the Dockyard was Conditionally Approved. Desktop survey for WWBIC data shows a field record of Common Pipistrelle Bat 2012-15 nearby. In addition there are records of Greater Horseshoe Bat associated with derelict buildings >500m away.

A walkover survey (internal & external) to consider protected species issues was undertaken. All available internal surfaces were examined for evidence of protected species – none found. This included small concrete block flat roofed rooms within the hangers, most of which had doors that were shut and no access to the rooms by protected species. The exceptions were a room in each hanger that had a metal grilled door – this gave sufficient natural light to make the room unattractive to bats as a day roost. Photographs of the structures available on request.

Due to the recent history of industrial use and no material changes to the external fabric of the building, lighting or operational working times, it is my opinion that there will be no further protected species surveys required subject to the following conditions:

No changes to current internal & external lighting;

No changes to current external fabric of the building;

Proposed use to include usual daytime operating hours in line with adjacent units."

The proposed development is located within an active port that experiences a steady flow of traffic all year round. Therefore, the highway access routes to Units 29 and 29A are well established and suitable for the type and volume of vehicle movements associated with this development. The industrial nature of the proposed activity within the vicinity of Units 29 and 29A is also compatible with the surrounding port.

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.*" However, as all of the bulking and transfer activities will occur inside buildings, with the exception of some small volume glass tipping directly into a sealed container, the ERA has concluded there will be no significant risk.

Air Pollution

There will be no significant emissions to the atmosphere from the bulking of waste inside Units 29 and 29A.

Author: Debbie Palfrey, CCP, WRAP Cymru

Date: 12th June 2019

