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**VALENCIA WASTE MANAGEMENT LTD**

**APPLICATION TO VARY PERMIT NUMBER EPR/BW0991IX**

**HABITATS RISK ASSESSMENT**

**MAY 2023**

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**MAY 2023**

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## CONTENTS

1	INTRODUCTION.....	1
2	SITE OPERATIONS.....	1
3	PROTECTED HABITATS .....	2
4	CONTROL MEASURES.....	2
4.1	Contaminated Water.....	2
4.2	Litter .....	3
4.3	Dust .....	3
4.4	Fire And Smoke .....	4
4.5	Noise.....	5
5	SUMMARY.....	5

## **1 INTRODUCTION**

- 1.1.1 Wardell Armstrong LLP has been commissioned by Valencia Waste Management Ltd to prepare a Permit Application to vary the existing Environmental Permit, EPR/BW0991IX, at the Erin Landfill, Markham Lane.
- 1.1.2 The existing landfill is permitted to accept non-hazardous commercial, industrial and household waste as well as having a separate cell for asbestos.
- 1.1.3 Valencia is seeking to move waste up the waste hierarchy by treating mixed non-hazardous waste arriving at the landfill to recover metals for recycling. The waste will be further treated to remove non-combustible material before it is sent off site for energy recovery. The residual waste will be used in landfill engineering or will be placed in the landfill.
- 1.1.4 No asbestos will be treated. The measures in place for the safe disposal of asbestos into a dedicated cell will continue as currently permitted.
- 1.1.5 This document provides a summary of the protected habitats nearby and the manner in which these will be protected. Section 2 describes the site operations. Section 3 describes the protected habitats that are present in the area. Section 4 describes the measures that will be in place on the site to prevent emissions to air, water and land and so protect the local human population and wildlife.

## **2 SITE OPERATIONS**

- 2.1.1 The site is currently permitted as a non-hazardous landfill with a specialist cell for the acceptance of asbestos waste. Valencia are seeking to improve rates of recycling and recovery and so are seeking variation of the permit to include a Materials Recycling Facility (MRF).
- 2.1.2 The purpose of the MRF will be to sort mixed waste to recover ferrous and non-ferrous metal, wood and plastic for recycling elsewhere. Waste will undergo an initial shred where necessary to present a material that is less than 300mm across to the recycling plant.
- 2.1.3 Metals will be removed via inline magnets and eddy current separators, with the remaining waste being treated using a combination of combi-screen and 3-way drum separator which will separate the residual waste into 3 discrete waste streams: a heavy fraction consisting of stones, glass and similar material, a refuse derived fuel

(RDF) consisting of plastic, card and similar materials and a fine material which may be used as daily landfill cover (if appropriate) or will be disposed of in the landfill.

- 2.1.4 The heavy fraction will be used for access roads on the landfill or for cover. The RDF will be sent to an R1 compliant energy from waste facility.
- 2.1.5 The machinery used to sort the waste will include overband magnets, eddy current separators, combi-screen, optical separator, fan blower and a 3-way separator.
- 2.1.6 All machinery and waste storage will be housed in a suitable building to contain any emissions.

### **3 PROTECTED HABITATS**

- 3.1.1 There are no European Sites (including SACs, SPAs and Ramsars) within 10km of the MRF.
- 3.1.2 There are no Sites of Special Scientific Interest within 2km of the site.
- 3.1.3 There are a number of Local Wildlife Sites within 2km of the site, with a range of priority habitats represented, deciduous woodland, good quality semi improved grassland, lowland meadows, reedbeds and traditional orchards.
- 3.1.4 The Local Wildlife Site lies around 410m to the east of the site and consists of the Markham Colliery Reedbed.
- 3.1.5 The protected species European Water Voles have also been detected 600m NW of the site.
- 3.1.6 The MRF lies within the current landfill footprint and does not impose directly on any protected habitat.

### **4 CONTROL MEASURES**

#### **4.1 Contaminated Water**

- 4.1.1 The protected habitats may be vulnerable to toxic contamination or eutrophication via chemicals leaching from the waste and dispersing via surface water or groundwater. To prevent this from happening all waste will be unloaded, stored, treated and loaded into vehicles to be taken off site inside a building.

- 4.1.2 The building roof and walls will prevent rainwater from entering the waste and will minimise any free liquid that may run-off.
- 4.1.3 Should any leachate arise, the building is provided with an impermeable concrete floor which will form an effective barrier and prevent leachate escaping the site. A 240 cubic metre sump will be provided and any run-off from the waste will be directed to this sump, from where it can be safely collected and disposed of.
- 4.1.4 In case of a fire additional storage will be provided by a sleeping policeman at the site entrance. Any firewater coming into contact with waste will run to the sump. Should the sump become full the speedhump across the doorway will ensure that any firewater is held on the building floor. Following the fire this water can be removed by tanker.
- 4.1.5 Any diesel or oils held on site for the operation of site plant will be stored in appropriate tanks or drums and will be provided with bunding to allow secondary containment. Such bunding will be designed to hold 110% of the contents of the largest vessel within the bund so as to ensure that nothing will escape in the event of a leak or spill.
- 4.1.6 Measures are therefore in place to prevent contaminated water leaving the site.

## 4.2 Litter

- 4.2.1 Litter can pose a danger to wildlife and it is important that it is contained.
- 4.2.2 To prevent litter leaving the site waste will be delivered and removed in enclosed vehicles, open vehicles must be sheeted.
- 4.2.3 Vehicles will unload inside the building. All waste storage and treatment will also take place inside the building. The operation will therefore be protected from the wind and any litter should be contained.
- 4.2.4 The building door will be kept closed as much as possible to prevent fugitive emissions of litter.
- 4.2.5 The site will be inspected on a daily basis and any litter will be collected and returned to the appropriate waste storage bay.

## 4.3 Dust

- 4.3.1 There may be a risk of dust arising from the treatment of waste. Dust can cause smothering of vegetation if uncontrolled. To minimise dust emissions the main

control is for waste to be unloaded and treated inside the building. As far as possible the doors will be kept closed to provide a high level of containment for any dust.

- 4.3.2 All site plant will be maintained and serviced in line with the manufacturer's recommendations to prevent excessive emissions from site plant.
- 4.3.3 The 3-way separator (large screener) is fitted with local air extraction which will direct air via a dust filter. This discharges air back inside the building. Where light materials leave the 3-way separator a spray bar is provided to damp down dust.
- 4.3.4 Vehicles entering and leaving the site must be enclosed or sheeted to prevent windblown litter or dust. Vehicles will be checked before leaving the site and must use the wheel wash where appropriate to prevent dust and mud being tracked out of the site.
- 4.3.5 The site roads will be properly maintained and swept as necessary. In addition, a 10 mile and hour speed limit will be imposed so as to minimise the potential for raising dust settled on the road.
- 4.3.6 A water supply is available on site and will be utilised where necessary to damp down dusty areas of the site.
- 4.4 **Fire and Smoke**
  - 4.4.1 The Materials Recycling Facility has a Fire Prevention Plan prepared in line with the Environment Agency's guidance. The site is provided with suitable firewalls and the size of waste piles will be limited.
  - 4.4.2 Waste will be turned round on a basis and will not be stored on site for more than 24 hours, limiting the chances for self-heating. Waste will be removed from site on a regular basis with all residual waste and RDF taken off site within 72 hours.
  - 4.4.3 The site will be fitted with a fire detection system and a deluge fire suppression system using water cannon. The fire suppression system can be triggered manually or automatically so that it will operate out of hours if the detection system picks up indications of a fire.
  - 4.4.4 Good housekeeping will be employed to ensure that dust and debris do not build up on hot surfaces or anywhere where they may pose a fire hazard. Mobile plant will be parked at least 6m away from the waste inside the building.
  - 4.4.5 A fire watch will be undertaken at the end of each day and during and after any hot works (e.g. welding) to ensure that no embers are present.

4.4.6 The measures in place will help prevent fires and prevent the spread of fire, should one occur limiting the potential for fire or smoke damage to receptors nearby.

#### 4.5 **Noise**

4.5.1 Some new equipment will be installed at the site. This has the potential to generate noise. However, the building will provide a degree of attenuation. Given the proximity of the existing landfill and nearby fabrication shop and scrap yard, the changes are not expected to generate a level of disturbance above that already present.

### 5 **SUMMARY**

5.1.1 Valencia is varying their permit to allow the installation of new equipment to sort waste. Overall, this will have a positive environmental benefit, allowing more waste to be sorted for recycling or energy recovery and reducing waste to landfill.

5.1.2 There are a no statutorily protected habitats around the site. There are a number of Local Wildlife sites nearby.

5.1.3 The site has a Dust Management Plan and Fire Prevention Plan in place. It is also provided with appropriate impermeable surfacing and sealed drainage to prevent pollution spreading via soils or groundwater.

5.1.4 Given that that the site is in an industrial area with the existing landfill to the west, industrial properties to the east and a commercial and industrial development to the south, the changes to the activities on site are not expected to have a significant impact on protected habitats in the area.



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