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VALENCIA WASTE MANAGEMENT LTD

SHELFORD LANDFILL VARIATION APPLICATION (EPR/XP3434HX)

HABITATS RISK ASSESSMENT

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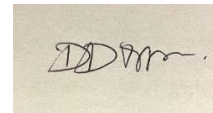
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1 INTRODUCTION

- 1.1.1 Wardell Armstrong has been appointed to prepare an application to vary the permit for Shelford Landfill Site at Shelford Farm Estate near Canterbury, Kent. The site is operated by Valencia Waste Management Ltd (Valencia) under permit number EPR/XP3434HX.
- 1.1.2 The site is permitted to accept non-hazardous commercial, industrial and household waste for disposal, as well as for the treatment of leachate arising from the landfill.
- 1.1.3 Valencia is seeking to prevent recyclable and recoverable wastes from going to disposal, in accordance with the principles of the waste hierarchy. The variation will allow mixed non-hazardous waste arriving at the landfill to be first treated to recover metals, wood and plastics for recycling, then further treated to remove non-combustible material to prepare the combustible wastes for energy recovery off-site. The residual waste will be placed in the landfill.
- 1.1.4 A number of sensitive habitat and ecological receptors have been identified in close proximity to the site, including European sites, SSSIs and ancient woodland, as well as sensitive species. This report provides the habitats risk assessment for the proposed operation, identifies potential risks and describes the mitigation in place to prevent or minimise those risks.

2 PROTECTED HABITATS AND SPECIES

- 2.1.1 Shelford Landfill is located on Shelford Farm Estate off Shalloak Road, 2.5 miles northeast of Canterbury, Kent. The nearest postcode is CT2 0PU, and the new MRF will be located at national grid reference (NGR) TR 16335 60113, south of the existing landfill site.
- 2.1.2 There are five European sites within 10km of the proposed MRF location, the nearest of which is Stodmarsh located approximately 1.9km east, designated as a SAC, SPA and Ramsar, as well as a SSSI (extending slightly west to within 1.7km of the MRF). At its eastern extent, over 5km away, Stodmarsh is also designated as a National Nature Reserve.
- 2.1.3 The remaining four European Sites are located over 4km away from the site at Blean Complex (SAC), The Swale (Ramsar and SPA), Tankerton Slopes and Swalecliffe (SAC), and Thanet Coast & Sandwich Bay (Ramsar and SPA). All of the sites are at a great enough distance that they are not considered to be especially vulnerable to the MRF activity, with any potential impacts mitigated by the distance.
- 2.1.4 There are four SSSIs within 2km of the site, including Stodmarsh. The nearest is West Blean and Thornden Woods SSSI which lies adjacent to the landfill's north and north-eastern permit boundary, with its closest point located at around 400m from the proposed MRF; the site is also designated as an ancient woodland throughout its extent. Chequer's Wood and Old Park SSSI is located 1.2km southeast of site, containing areas of Ancient Woodland at Chequers Wood and Scotland Hills. Sturry Pits SSSI is located 1.3km east of the site, however is considered of geological interest, therefore not vulnerable to the activity.
- 2.1.5 A summary of the characteristics of the most proximal European sites and SSSI's that have the potential to be impacted by the activity is provided in Table 2.1, below.

Table 2.1: Habitat Characteristics	
Habitat	Description
Stodmarsh SAC, SPA, Ramsar, SSSI	This wetland site located in the Stour valley contains a wide range of habitats including open water, extensive reedbeds, scrub and alder carr which together support a rich flora and fauna. The vegetation is a good example of a southern eutrophic flood plain and a number of rare plants are present. The invertebrate fauna is varied and several scarce moths have been recorded in recent years. The site is also of

Table 2.1: Habitat Characteristics	
Habitat	Description
	ornithological interest with its diverse breeding bird community. Two rare British birds cetti's warbler and bearded tit, regularly breed in nationally significant numbers
West Blean and Thornden Woods SSSI	West Blean and Thornden Woods, lying to the north of Canterbury, comprise a mosaic of ancient semi-natural woodland and conifer plantation within the ancient Blean Forest complex and include several rare woodland types. The area is noted for birds with over 50 species of breeding bird having been recorded The woodland also supports a diverse invertebrate fauna including 5 nationally rare and 13 nationally scarce species. The woods are situated on London Clay and gravel drift deposits which have given rise to a range of free to poorly drained moderately acidic soils
Chequer's Wood and Old Park SSSI	The woodland in the valley is a good example of a base-rich springline alder wood. Unimproved acidic grassland is present on the dry sandy plateau in the western part of the site. In addition a variety of other habitats are present including pedunculate oak-birch woodland, dense scrub and a pond. Some uncommon plants occur and the area also supports a diverse breeding bird community. The mosaic of grassland, scrub and woodland gives this site considerable interest. The acidic sandy soils of the plateau contrast with the base-rich peaty soils of the valley bottom. There is consequently a wide variety of plants present.

2.1.6 Additional areas of ancient woodland are located at Dengrove Wood (750m northeast), Hoards Wood (2km northeast) and Kemberland wood (1.9km northeast), Middle Shaw (1.7km north), Brickhouse Wood (780m northwest) and an unnamed wood on Canterbury Hill road (2km west).

2.1.7 The Great Stour, Ashford to Fordwich Local Wildlife Site (LWS) is located 170m south of the proposed facility and is the nearest designated site to the proposed MRF. One further LWS is located within 2km of the site at Little Hall and Kemberland Woods and Pasture (800m northwest at its closest point). An additional LWS was identified by an EA pre-application habitat screening report at Tyler Hill Pastures, however this site is over 2km from the proposed MRF building.

2.1.8 Table 2.1 below summarises the habitats receptors within 2km of the site.

Table 2.2: Habitats Receptors with 2km of the proposed MRF

Habitats Receptors		
Woods in Southern extent of permit boundary	Priority Habitat Inventory - Deciduous Woodland	Adjacent
Great Stour, Ashford to Fordwich Local Wildlife Site	Local Wildlife Site	170m South
Great Stour	River	250m South
West Blean and Thornden Woods	SSSI, Ancient Woodland, Priority Habitat Inventory - Deciduous Woodland	400m East
Woods adjacent to Canterbury City Park and Ride	Priority Habitat Inventory - Deciduous Woodland	700m Southeast
Dengrove Wood	Ancient Woodland, Priority Habitat Inventory - Deciduous Woodland	750m Northeast
Brickhouse Wood	Ancient Woodland, Priority Habitat Inventory - Deciduous Woodland	780m Northwest
Little Hall and Kemberland Woods and Pasture	Local Wildlife Site, Priority Habitat Inventory - Deciduous Woodland	800m Northwest
Chequer's Wood and Old Park	SSSI, ancient woodland	1.2km southeast
Middle Shaw	Ancient woodland	1.7km north
Stodmarsh	SAC, SPA, Ramsar, SSSI and NNR	1.9km east
Hoards Wood	Ancient woodland	2km northeast

3 POTENTIAL IMPACTS AND MITIGATION

3.1 Noise and Vibration

- 3.1.1 Excessive noise and vibration can cause disturbance to sensitive species, such as birds, bats and mammals. The MRF building is proposed to be located on the southern extent of the existing operational landfill site next to the leachate treatment plant and gas engine compound. As the building is in an industrial setting and the majority of habitats at least 300m away, it is considered unlikely that the cumulative noise from the operation will adversely impact local habitats and species.
- 3.1.2 The MRF treatment operations will take place inside a building with doors closed other than to allow vehicles access and egress. The building will attenuate noisy emissions from the MRF plant and equipment.
- 3.1.3 Plant and machinery will be properly maintained and serviced in accordance with the manufacturer's recommendations, and turned off when not in use.
- 3.1.4 The site's traffic management plan will be extended to the MRF operations to ensure reversing and idling continues to be minimised as far as possible.
- 3.1.5 It is therefore deemed unlikely that there will be any noise disturbance to the identified habitats as a result of the new operations.

3.2 Dust

- 3.2.1 Dusty emissions have the potential to damage habitats and affect sensitive species through smothering and respiratory distress. The risk of dust emissions will primarily result from the handling and treatment of wastes, as well as from the operation of mobile plant and other vehicles used to transport waste. There will be no excessively dusty loads accepted at the MRF, with waste types excluding those made up of predominantly powders and loose fibres.
- 3.2.2 A Dust Management Plan has been developed for the site for the site to ensure that dust is controlled throughout the operation. Measures used to control dust will include:
- Sorting and screening will be carried out inside MRF building, with doors remaining closed other than to allow vehicle access and egress;
 - A wheel wash is available onsite and will be used as needed;

- Dusty stockpiles and site roads will be damped down if required in dry weather;
- Site roads properly maintained and swept as necessary to prevent the build-up of dried mud and dust; and
- Plant will be properly maintained and serviced to minimise emissions.

3.2.3 The dust management plan has been developed with considerations for the proximity of local sensitive receptors with the aim of preventing any particulate emissions beyond the permit boundary as far as practicable. The control measures outlined in the plan will be employed to appropriately mitigate the risk of dust emissions causing cumulative impacts on nearby receptors.

3.3 Litter

3.3.1 If uncontrolled, litter can be wind-blown and deposited on sensitive habitats and cause disturbance and distress to local wildlife.

3.3.2 Measures will be in place to prevent litter. Waste will be unloaded inside the waste MRF building. The building will be fitted with fast acting roller shutter doors which will, as far as possible, be kept closed except for allowing vehicle access and egress.

3.3.3 Waste will be stored in dedicated storage bays or containers appropriate for the waste type. Daily inspections will be made and any loose waste noted lying around will be collected and transferred to the appropriate bay or container.

3.3.4 Incoming and outgoing vehicles will be enclosed or have appropriate sheeting to contain any waste.

3.4 Emissions to Water

3.4.1 There are no planned emissions to water from the operation. Water for fire control purposes will be stored within a bunded firewater storage tanks. Firewater from extinguishment of any on site fire will be contained on the site and tankered to an appropriately permitted facility for treatment.

3.4.2 The building has an impermeable concrete floor which is designed for liquid from wastes to drain towards a sealed sump. Sump capacity will be maintained, with collected liquids periodically sent for treatment to the site's leachate treatment plant (or offsite to an appropriately permitted facility). The sump will have a capacity of 240m³. In the event of a fire, sump and the building floor footprint can contain up to 484m³ of firewater.

3.4.3 Any fuels and any other liquids stored on site will be stored within double-bunded containers. Spill-kits will be available nearby which site operatives will be trained to use in case of spillages.

3.4.4 These measures are in line with Environment Agency guidance provide high levels of protection, preventing harmful emissions to surface water or groundwater. The risk of contaminants reaching the SSSI or other protected habitats via the water environment is very low.

3.5 Point Source Emissions to Air

3.5.1 There are no point source emissions to air from the proposed from the permitted operation, therefore presenting no risk to habitats.

4 MANAGEMENT

4.1 Monitoring

- 4.1.1 Site inspections, including monitoring of emissions of dust, noise, litter and odour will be undertaken periodically. Throughout the day staff will be aware of the need to report any excessive emissions so that the cause can be identified and resolved.
- 4.1.2 Formal monitoring will take place at least once a day with an inspection being made around the outside of the building along the site road and at the site entrance. The finding of this inspection will be recorded in the site log.
- 4.1.3 Where polluting emissions are noted leaving the site or escaping from the MRF building (paying particular attention to entrances and exits where fugitive emissions are most likely), this will be recorded and immediately reported to the site manager. Steps will be taken to confirm the source of the dust and take remedial action.

4.2 Environmental Management System

- 4.2.1 The site will be operated in accordance with a formal Environmental Management System which has been developed in line with Environment Agency guidance. Standard Operating Procedures will be in place to ensure that waste materials are handled appropriately and safely.
- 4.2.2 The site plant and infrastructure will be subject to regular inspection, servicing and maintenance to ensure that it remains fit for purpose and all emissions are prevented or controlled.

5 CONCLUSION

- 5.1.1 There are no proposed point source emissions to land, air or water from the site.
- 5.1.2 Emissions of noise from the site are expected to remain within background levels at the nearest receptors, and therefore are not expected to cause any disturbance to wildlife within the protected habitats identified close to the site.
- 5.1.3 The design and operational measures that will be in place at the site will ensure that activities do not pose an unacceptable risk to the environment.
- 5.1.4 Site equipment, machinery and infrastructure will be maintained in accordance with manufacturer's guidance and relevant legal standards to ensure that the site remains compliant, and risk to sensitive receptors remains low.
- 5.1.5 The site will be monitored daily. Records evidencing compliance will be maintained in the site office. Formal auditing of compliance will take place annually, informing continuous improvement.
- 5.1.6 In the event of a fire or accident, strict procedures will be followed to prevent excessive damage to the site and prevent harm to the local environment.
- 5.1.7 A planned preventative maintenance programme will be in place to ensure that all pollution prevention infrastructure is properly maintained and remains fit for purpose.
- 5.1.8 As a result of the control measures in place no significant impact on nearby European sites, SSSIs or other wildlife sites is expected. It is considered that all reasonable precautions to protect these sites will be taken.

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