Site Condition Report
June 2016

Llanwern East Waste Management Site
Tata Steelworks Llanwern
Queensway
Newport

Cuddy Remediation Ltd

Francis House
Tank Farm Road
Llandarcy
Neath

T +44 (0) 1792 321 110
F +44 (0) 1792 321 411

www.cuddy-group.com

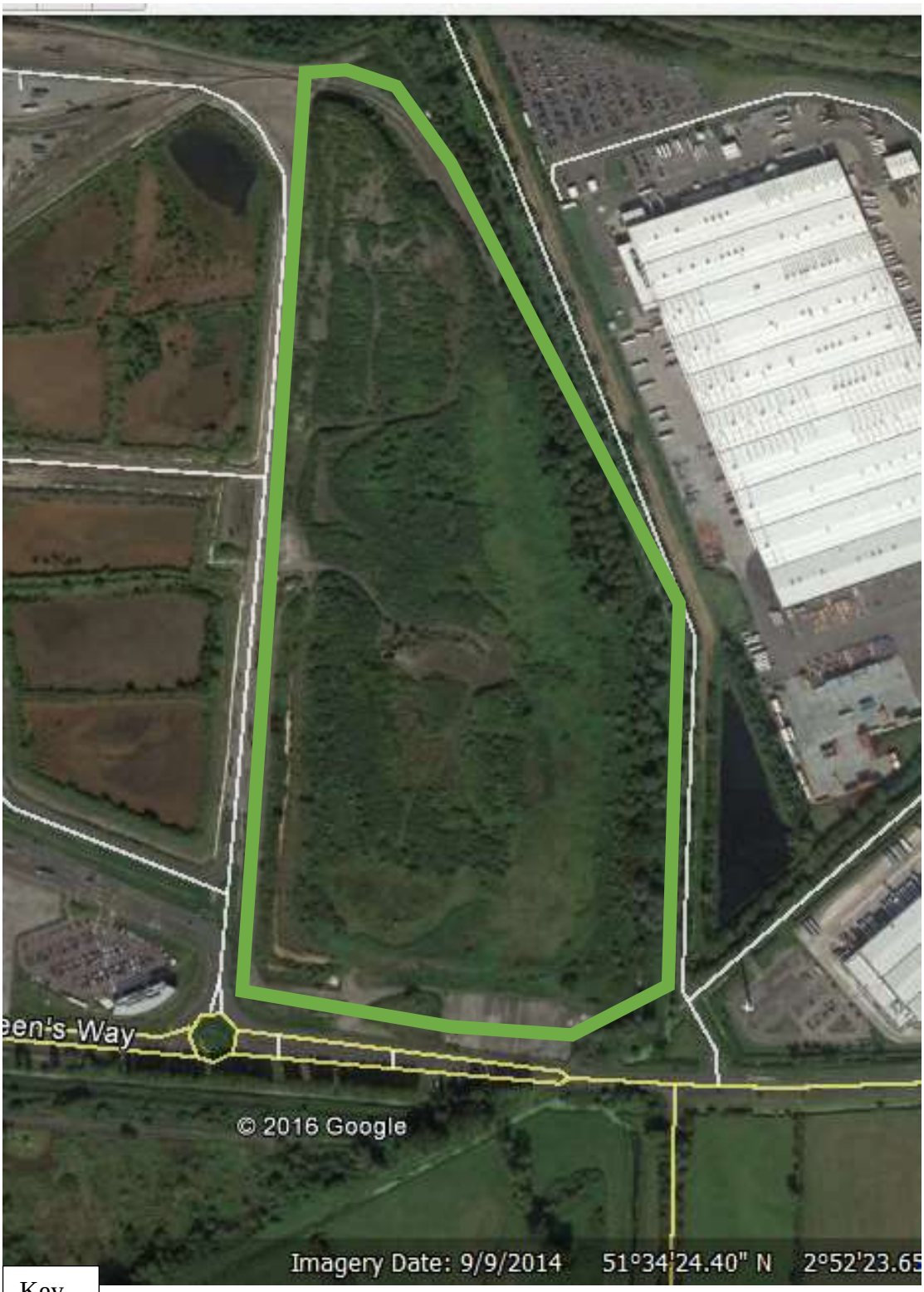
Contents

1.0 Site Details

Site Details	
Name of the applicant	Cuddy Demolition & Dismantling Ltd
Activity address	Llanwern East Waste Management Site Tata Steelworks Llanwern Queensway Newport NP26 3WN
National grid reference	Eastings: 339546 Northings: 186539

Llanwern East Waste Management Site Location Plan

Grid Reference Eastings: 339546 Northings: 186539



Key

Site Boundary

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	The site occupies an area of 197,835m2 (19.78 Ha) which is fully occupied by deposited wastes. The landform of the site comprised a steep sided plateau, with only 1m of relief across the top of the land raise. LEWMS measures approximately 830m long by 300m wide with the long axis oriented north to south. In the northern half of the site, the boundary tapers to a point whilst the southern half of the site boundary is a uniform rectangle measuring 300m wide by 400m long. To the east, the landform slopes gently down to the steelworks boundary at Hundred Perches Reen, a slow flowing man-made ditch draining the surrounding levels. Mature vegetation has established itself along the eastern batter of the landfill, forming a tree and vegetation screen to the land raise. The western and southern boundaries of the site were steep waste slopes which dropped from the waste plateau to site roads within the steel plant. These boundaries have leachate collection ditches running along 50% of their length, set between the toe of the waste slope and the site roads. Surface water flows within the open collection ditches are directed into Drain 10 of the works effluent treatment system. The north-eastern boundary of the site is marked by a shunting spur to the works railway system. Between the toe of the waste slope and the railway, a ditch has been excavated to collect leachate moving through the slag starter layer beneath the waste. Leachate from this ditch is piped into Drain 9 of the works effluent treatment system. With the exception of the eastern batter, each of the existing slopes comprise waste materials (principally steel slag) with a thin, impersistent covering of dredgings from the water courses around the plant.

	The land surrounding LEWMS is flat lying, and forms part of the Gwent levels. This is an area of reclaimed coastal marshland that extends through several counties surrounding the Severn Estuary. The site is 3.5km from the current estuary boundary which is due to extensive land drainage and sea flood defences maintenance since Roman times. Land use comprises low grade arable and grazing land in a system of fields separated by drainage ditches or reens. The reens form an inter-bedded network of drainage ditches with levels controlled by a series of sluices at the sea defence to the south of the site. Surface water discharges at low tide and at periods of high water the sluices are closed to prevent seawater incursion into the reen system. The nominal elevation of the ground surface surrounding the site is 5m AOD with a reen water level of 2.3m AOD.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	The site lies at the eastern edge of the Tata Steel Limited (Tata) Llanwern Steelworks and has accepted steelmaking and general wastes from the Llanwern site for four decades. The waste management site is a land raise, with wastes being deposited initially into very shallow excavations (circa 1 metre) onto natural ground. Disposal has developed a raised landform that now reaches 15m above Ordnance Datum (AOD), or some 10m above surrounding ground level.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	The site was a former steelworks landfill for over 50 years. The project aims to restore the site and cap over any contamination.
Baseline soil and groundwater reference data	The results of the environmental monitoring carried out around the site are in the document: LEWMS Annual review of environmental monitoring, which is enclosed in this permit application.

3.0 Permitted activities	
Permitted activities	A mobile plant permit, Medium Risk Deployment was issued between June 2015 – June 2016. This has now expired and a site based permit is being applied for.
Non-permitted activities undertaken	Lining works including geomembrane and geocomposites to prevent rainwater infiltration into the waste mass.
Document references for: • plan showing activity layout; and • environmental risk assessment.	Llanwern EWMS Site Location Plan. Llanwern EWMS Site Specific Risk Assessment.

8. 9. 4.0 Changes to the activity 10.	
11. 12. Have there been any changes to the activity boundary? 13.	14. 15. No
16. 17. Have there been any changes to the permitted activities? 18.	19. 20. N/A
21. 22. Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities? 23.	24. 25. No

26. 27. 5.0 Pollution incidents that may have had an impact on land, and their remediation 28.

29.
30. N/A
31.

32.
33. 6.0 Soil gas and water quality monitoring (where undertaken)
34.

35. Provided in: LEWMS Annual review of environmental monitoring
36.

37.
38. 7.0 Decommissioning and removal of pollution risk
39.

40.
41. When the project is completed and the site is capped off with the lining system and capping soils the pollution risk from the site will be removed. Any rainwater will hit the capping surface and run off the site through the surface water drainage network installed around the crest and toe of the slopes.
42.
43. The LEWMS Closure Report has been submitted as part of this Site Condition Report.
44.