



Ringway Infrastructure Services Ltd.

Site Condition Report

A Bespoke Environmental Permit Application for a Waste Transfer Station for the Receipt, Storage and Dispatch of Non-Hazardous Highway Excavation Wastes, Road Gully Arisings and Street Sweepings, at Melksham Depot, 24 Hercules Way, Bowerhill, Melksham, Wiltshire, SN12 6TS.

Report Ref: CE-RW-1303-RP02-Draftv3.0



Produced by Crestwood Environmental Ltd.

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This report has been prepared in good faith, with all reasonable skill, care and diligence, based on information provided or known available at the time of its preparation and within the scope of work agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

The report is provided for the sole use of the named client and is confidential to them and their professional advisors. No responsibility is accepted to others.

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DRAWINGS

Drawing No CE-RW-1303-DW01 Site Location and Environmental Permit Boundary 1:500

1 SITE DETAILS

1.1 BACKGROUND

- 1.1.1 Crestwood Environmental Ltd. have been instructed by Ringway Infrastructure Services Ltd (***the Client***) to prepare and submit a Site Condition Report in support of the application for a bespoke Environmental Permit for a Waste Transfer Station at Melksham Depot, 24 Hercules Way, Bowerhill, Melksham, Wiltshire, SN12 6TS (***the Site***).
- 1.1.2 The Site will receive road gully wastes, street sweepings, non-hazardous highway excavation wastes such as used tarmac and soils and small, incidental quantities of scrap metal and green waste. Wastes will be stored on Site in dedicated bays to ensure that materials are kept separate, prior to them being bulked up and removed off Site to authorised facilities. Scrap metal will be stored in a dedicated sealed container.
- 1.1.3 Wastes will be tipped into specially engineered, dedicated bays with concrete surfaces, which fall to a sealed drainage system incorporating an interceptor and foul sewer discharge. In terms of gully wastes, dewatering will occur by natural gravitational run-off to the sealed drainage system. Grit and other residues from gully emptying will remain in-situ in the bay prior to its bulking up and removal off-Site to authorised facilities.
- 1.1.4 Due to the nearest sensitive residential and workplace receptors being located less than 500 m from Melksham Depot a bespoke permit application is required.
- 1.1.5 The Site Condition Report has been prepared using the Environment Agency H5 Guidance and supporting Template.
- 1.1.6 Site details are shown in Table 1 below.

Table 1: Site Details

Site Details	
Name of the Applicant	Ringway Infrastructure Services Ltd.
Activity Address	Melksham Depot, 24 Hercules Way, Bowerhill, Melksham, SN12 6TS
National Grid Reference	ST 91033 61701
Document Reference and Dates for Site Condition Report at Permit Application and Surrender	CE-RW-1303-RP02 April 2018
Document References for Site Plans (including location and boundaries)	Drawing No CE-RW-1303-DW01

2 CONDITION OF LAND AT PERMIT ISSUE

2.1 THE SITE AND SURROUNDING AREA

- 2.1.1 The Client is proposing to operate a Waste Transfer Station for the receipt, storage, bulking up and dispatch of non-hazardous highway wastes including gully emptyings, street sweepings, excavation wastes and incidental amounts of scrap metal and green waste. The maximum waste input will be 2,500 tonnes per annum which includes 5 tonnes of scrap metal and 2 tonnes of biodegradable waste.
- 2.1.2 The Site incorporates an impermeable concrete surface that drains to foul sewer, via an interceptor, in accordance with a Discharge Consent issued by the sewerage undertaker.
- 2.1.3 The Site (National Grid Reference: ST 91033 61701) is located approximately 1.75km south-south east of central Melksham in the outer suburb of Bowerhill. It is situated within the southern portion of an industrial estate to the east of the A350 and is accessed via Hercules Way. Refer to Drawing No CE-RW-1303-DW01.
- 2.1.4 The Site is bordered to the north and east by other industrial premises. There is a further commercial premises circa 50m to the South West. Nearby land to the south and west is mainly agricultural, refer to Drawing No CE-RW-1303-DW01.
- 2.1.5 The nearest residential receptors to the proposed development are a housing estate at approx. 158m east of the Proposed Permit Boundary at the closest point and extends 1.2km at the furthest. Bowerhill Primary School is nestled within the residential area approximately 500m to the north-east. Numerous farms are located within 1km of the Site and include:
- Newton Farm – c.766m south-west,
 - Hampton Farm c.830m north-east,
 - Melksham Park Farm 880m south,
 - Bowerhill Farm c. 915m north-east,
 - Seend Park Farm c. 944m south-east and
 - Woolmore Farm c. 1km north-east in relation to the Site.
- 2.1.6 Beyond the A350 to the west of the Site is Hampton Park West Business Park containing the Police HQ located at a distance of 635m. A sports ground and sports centre are also located to the west of the Site at 77m and 350m respectively whilst a sewage works is sited 850m to the north-west.
- 2.1.7 In terms of ecological designations, within a 2km radius of the application, there are no Sites of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA,) RAMSAR sites, National Nature Reserves or Local Nature Reserves. See Section 2.6.

2.2 HYDROLOGY

Surface Water / Rivers

2.2.1 The principal water body in the vicinity of the Site is the River Avon located 2.9km to the west and its associated tributaries, notably the Semington Brook 835m to the south at its closest extent. Also to the south is the Kennet and Avon Canal circa 1km at the most proximal point and runs east to west in relation to the Site. Numerous surface drains and issues are in the area with the closest aligned to the southern boundary of the Site.

Surface Water Abstractions

2.2.2 Forming part of the Environmental Agency's Catchment Abstraction Management Strategy (CAMS) to assist in the sustainable management of water resources, the Site falls within the Bristol Avon and North Somerset Streams WFD Management Area Abstraction Licencing Strategy. It provides information regarding the availability of water for further abstraction whilst managing the water resources in the catchment to ensure the sustainable use of as well as contributing to achieve objectives set out in the Water Framework Directive (WFD) i.e. to protect and enhance the water environment. Encompassing an area of approximately 2220km² the Bristol Avon river catchment includes the major cities of Bath and Bristol. From its source upstream of Malmesbury, the primary river flows south then west through gentle rural landscapes for 134km terminating at the Severn Estuary. The Site is located in the eastern region of the CAMS area.

2.2.3 Based on the CAMS there is restricted surface water availability for licencing during low flows and water is available for abstraction during periods of high flow. No new consumptive licences will be granted during low flows whereas in high flows, new licences will be considered depending on local and downstream impacts. Groundwater availability is guided by the surface water resource availability with both pertaining to the same restrictions.

2.2.4 There are 4 identified surface water abstractions registered within 2km from the Site; details are given in table 2 below:

Table 2: Surface Water Abstraction Licences

Licence Number	Distance (m) and Direction from Site	Licence Holder	Annual Volume (m ³)	Use
17/53/009/S/095	1095 South	Masters	9092	Spray Irrigation-Direct
17/53/009/S/001	1453 South west	Bruges	1182	Spray Irrigation-Direct
17/53/009/S/001	1578 South west	Bruges	Not specified	Spray Irrigation-Direct
17/53/009/S/063	1807 South	Breach	Not specified	Spray Irrigation-Direct

Groundwater Abstractions

2.2.5 With reference to records held by the Environment Agency there is one abstraction licence within 2km of the Site for groundwater. It is sited at 1829m to the north west for the purposes of general

farming and domestic use. The licence is historical with the original start date of 25/03/1966, licence number 17/53/001/G/241 under the name of Guley. Annual and maximum volume rates are not specified.

Flood Risk

- 2.2.6 Based on the Environment Agency website, 'What's in your backyard' (<http://apps.environment-agency.gov.uk/wiyby/default.aspx>) the Site is **not** located in a flood plain. The Site is situated in Flood Zone 1 which means that the chance of flooding each year is 0.1% (1 in 1000) or less. The closest flood zones 2 and 3 are at a distance of circa 1km south to the Site. See flood map below.



Figure 1. Flood map for planning. Flood zone 1 has a low probability of flooding.

2.3 GEOLOGY

- 2.3.1 The British Geological Survey (BGS) maps (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>) state that the superficial deposits on the Site and the immediate vicinity comprises subaerial slope deposits of clay, silt, sand and gravel. They are detrital and range from coarse to fine grained sedimentary material forming down-slope layers and fans.
- 2.3.2 In terms of bedrock geology, the Site is underlain with mudstone from the Oxford Clay Formation. These deposits are typically coarse to fine grained sediments that form interbedded sequences, with some carbonate content locally, derived from the Jurassic Period (164-166ma.)
- 2.3.3 The Site is not on or adjacent to land designated nationally or locally for its geological importance.

2.4 INFILLED LAND

- 2.4.1 Infilled land is 'areas where the ground has been cut away then wholly or partially backfilled'. The Environment Agency records shows that there are no areas of infilled land within the Site, the proposed permit boundary or within 1.5km of the Site.

2.5 HYDROGEOLOGY

Aquifer Classification

- 2.5.1 The Environment Agency website 'What's in your backyard' states that the superficial slope deposits have been assigned as a Secondary Undifferentiated Aquifer as it has not been possible to attribute it to either category A (a rock type with permeable layers) or B (a rock type with lower permeability). In the majority of scenarios, the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variability in lithology.
- 2.5.2 The Mudstone bedrock of the Oxford Clay Formation has been designated as an Unproductive Strata defined as rock layers with low permeability and negligible significance for water supply.

Groundwater Source Protection Zones

- 2.5.3 These zones ensure water is consumable as well as assisting in the monitoring of the risk of contamination from any activities that potentially cause pollution in the area. The Site location is not defined as either a Groundwater Source Protection Zone or a Groundwater Vulnerability Zone.

Nitrate Vulnerable Zone

- 2.5.4 Nitrate Vulnerable Zones (NVZ) are designated areas of land that drain into nitrate polluted waters or waters which have the potential to become polluted by nitrates. They are defined as 'catchments where nitrate concentrations in sources of public drinking water exceed, or are likely to exceed, the EC limit of 50 milligrams per litre'. The Environment Agency 'What's in your backyard' website indicates that the Site does not lie within a Surface or a Groundwater Water NVZ Area.

2.6 PROTECTED SITES

- 2.6.1 The Magic Map website (<http://www.natureonthemap.naturalengland.org.uk/magicmap.aspx>) shows that there are no European Sites (i.e. Sites of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Areas (SPA`s), RAMSAR sites or other statutory sites within a 2km radius of the application.
- 2.6.2 There are numerous listed buildings sited in within the 2km zone although none of these are on the Site or closer than 900m.
- 2.6.3 Under the Priority Habitat Inventory and the National Forest Inventory an area aligned with the dismantled railway circa 145m south of the Site is classified as deciduous broadleaved woodland.
- 2.6.4 Species diversity is dominated by birds classified under the Grassland Assemblage of Farmland Birds. Lapwing cover three quarters of the 2km radius including the Site itself while tree stone curlew are

established towards the south-east region of the 2km zone.

2.7 POLLUTION HISTORY

Pollution Incidents that may have affected the Land

2.7.1 The Environment Agency records shows that there has been one reported pollution incident on the Site on 17th May 2002 (incident identification: 79363). This was caused by an unnamed inorganic chemical or product which resulted in no impact to land and air (Category 4) and a minor impact to water (Category 3).

2.7.2 Other pollution incidents documented within a 500m radius are listed below; all 8 involve either Category 4 `No Impact` or Category 3 `Minor Impact`:

- At 10m south west of the Site a category 3 impact to water and a category 4 impact to land and air occurred on 29th June 2001 with the pollutant identified as mixed/waste fuel (incident ID: 12361).
- At 19m west of the Site a category 3 impact to water, land and air occurred on 26th April 2001 with the pollutant described as hydrocarbons (incident ID: 3528).
- At 21m south west of the Site a category 3 impact event took place on 31st October 2002 where the pollutant involved was kerosene and aviation fuel (incident ID: 117983).
- At 153m east of the Site a category 3 impact to water and air and a category 4 impact occurred to land on the 26th June 2001 with the pollutant concerned being unidentified (incident ID: 11499).
- At 331m west of the Site a category 3 impact to water and a category 4 impact to land and air took place on 20th April 2001 in which the pollutant identified was diesel (incident ID: 2900).
- At 336m north of the Site a category 3 impact to water and a category 4 impact to land and air occurred on 23rd October 2001 where the pollutant was classified as `not identified` (incident ID: 26297).
- At 403m north west of the Site a category 4 impact event occurred to water, land and air on 17th December 2001 with the pollutant concerned identified as asbestos (incident ID: 48487).
- At 465m north west of the Site a category 3 impact to air and a category 4 impact to water and land occurred on 10th July 2002 where the pollutant involved was smoke (incident ID: 90492).

Historical Land Uses and Associated Contaminants

2.7.3 Historical maps of the Site, derived from www.old-maps.co.uk have been reviewed as part of this Site Condition Report. The plans date back to 1886, refer to Table 3 below:

Table 3: Sequence of Historical Activities on Site

Date	Land Use
1886	The Site and surrounding area are predominantly rural with numerous farms interspersed. G.W.R Berks and Hants extension is in use to the south of the Site and Semington Lane (the modern day A350) leads into Melksham to the north with intermitent farms and houses along it. Running parallel in a north – south alignment is the Wiltshire and Berkshire Canal. To the east, Spa Road is situated in a similar orientation to Semington Lane with a few dwellings located along it.
1888	Largely no change.
1900	A few more dwellings are constructed along Semington Lane with Allotment Gardens and a Methodist Chapel. Railway line has been renamed to the Devizes Branch.
1924	Site itself and immediate environs remain as rural agricultural land. The Wiltshire and Berkshire Canal to the west is now disused and there are more properties constructed along Semington Lane and Spa Road.
1926	Largely unchanged from previous. The Site itself is still agricultural land.
1936	As above.
1938-1942	The area remains largely unchanged.
1960-1961	Bowerhill area is built-up with industrial units and interconnecting roads similar in dimension as the present day although the Site itself is undeveloped.
1972-1973	All the buildings in Bowerhill described in the preceding map have been demolished with the exception of a strip of warehouses to the west of the Site.
1975-1976	The region west of Bowerhill Farm on the Spa Road is developed with properties whilst the central of the present day residential area has yet to be built on. The Site itself remains as described in previous maps.
1976-1988	All of the area is now developed with an industrial unit constructed on the land adjacent to the east of the Site. The Site however remains as rural land.
1991-1992	The local environ is well established as an urbanised area and the Site itself contains an industrial /commercial building.

Evidence of Historic Contamination

2.7.4 The Site Walkover was undertaken on the 22 January 2018. The majority of the Site consists of an external yard area with an engineered concrete and hardcore surfaces. There were no visible signs of likely ground contamination, oil or diesel contamination or ground staining by hydrocarbons. There was no evidence of vegetation stress in the vicinity of the Site. Photographs are shown below.

Photo 1: Concrete Pavement



Photo 2: Drainage



Photo 3: Engineered Bay Construction and Scrap Metal Storage



3 PERMITTED ACTIVITIES

- 3.1.1 The Operator, Ringway Infrastructure Services Ltd, intends to operate a Waste Transfer Station for non-hazardous materials comprising road gully wastes, street sweepings, highway excavation wastes such as tarmac and soils and incidental amounts of scrap metal and green waste.
- 3.1.2 Gully wastes will be dewatered by natural gravitational means prior to removal to an authorised facility. Storage of waste materials will be within engineered bays (except scrap metal which will be stored in a sealed container). The proposed waste activities are those specified in Table 4 below:

Table 4: Permitted Activities

Storage / Treatment Process	Annex I/II operations
Physical dewatering of gully arisings by gravitational run-off, prior to disposal of solid waste at landfill.	Annex I D9 Physical / physico- chemical treatment of waste prior to any other disposal operation
Storage of waste for removal off-site to an authorised facility.	Annex I D15 Storage pending operation numbered D9
Storage of waste for removal off-site to an authorised facility.	Annex II R13 Storage of waste pending any of the operations numbered R1 to R13

Substances

- 3.1.1 Oils and grease will be required for maintenance of the treatment facility.
- 3.1.2 No substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) Regulations will be used at the Site.