Caulmert Limited

Engineering, Environmental & Planning Consultancy Services

Bletchley Waste Processing Facility

FCC Waste Services (UK) Limited

Environmental Permit Variation Application

Site Condition Report Addendum

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Site Condition Report Addendum

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1.0 SITE CONDITION REPORT

1.1 Overview

1.1.1 FCC Waste Services (UK) Limited (a wholly owned subsidiary of FCC Environment (UK) Limited), have appointed Caulmert Limited to prepare an environmental permit variation application to vary the existing Bletchley Waste Processing Facility permit ref. EPR/FB3530RC to add a Section 5.3A(1)(a)(ii) activity to include for the treatment of up to 100,000 tonnes per year of hazardous asbestos-impacted soils by pre-screening by 3-way screen and removing visible bound asbestos fragments within the existing Waste Processing Facility building.

1.1.2 There are no proposed changes to the Bletchley Waste Processing Facility permit boundary or current permitted activity or tonnages at the Waste Processing Facility as part of this permit variation application.

1.1.3 A Site Condition Report (SCR) ref. WR7052/03 was produced in September 2012 by Stratus Environmental Limited (see Appendix 1) for the Bletchley Waste Processing Facility (or Materials Recycling Facility (MRF) as it was referred to then) and this covered the proposed activities at the time for the production of Refuse Derived Fuel (RDF) bales within the permit boundary. The RDF activity has now ceased for the foreseeable, but it is proposed to retain this activity in the permit. Therefore, this SCR Addendum has been produced as an update to the existing SCR to include for the proposed new storage and treatment of asbestos-contaminated soils activities at the site.

1.2 Template for Site Condition Reports

1.1.1 The EA guidance on Site Condition Reports (horizontal guidance note H5) sets out the requirements to prepare and maintain a site condition report for facilities that are regulated under the Environmental Permitting Regulations over the lifetime of the Site.

1.1.2 A Site Condition Report template is provided within the guidance. The template is divided into sections to be completed at different life stages of the regulated facility:

Sections 1-3 to be completed and submitted with applications for new facilities: This should include a description of the condition of the land at permit issue and a description of permitted activities at the site.

Sections 4-7 to be maintained during the life of the site: This should include a description of any changes to the activities and any changes to the use or production of dangerous substances at the facility. It should also include records of inspections for all pollution prevention measures, pollution incidents that may have had an impact on land and environmental monitoring.

Sections 8-10 to be completed and submitted with surrender applications: This should include a description of site decommissioning and removal of pollution risk and, where relevant,

reference data and details of any remediation. Finally, it should include a 'statement of site condition' that is based on the information provided in the previous sections of the report.

1.1.3 This Site Condition Report Addendum briefly addresses Sections 1-3 and Section 4 for adding a new activity in order to support the permit variation application.

2.0 SITE DETAILS

2.1 Operator and Site Location

2.1.1 Bletchley Waste Processing Facility ('the Site') is located adjacent to FCC-operated Bletchley Landfill Site, and both are accessed off Guernsey Road in Bletchley, Milton Keynes (see Figure 1 below). The site is centred on National Grid Reference SP 86845 32152 and the postcode for the site is MK3 5JU.

Figure 1 - Site Location Plan

2.1.2 The Site is located to the south of Milton Keynes on the urban fringe, approximately 270m west of the residential area of Water Eaton, 350m north of Newton Leys, 950m south of Bletchley and around 6km south of the centre of Milton Keynes.

2.1.3 The Site is situated within the area designated the 'Main Line' Local Wildlife Site (LWS) and the Site is also located 30m immediately south of the designated 'Blue Lagoon' Local Nature Reserve (LNR) and Local Wildlife Site (LWS). No other designated sites within 2km.

2.1.4 The details of the operator and the site are as follows in Table 1:

Table 1 - Operator Details

Name of operator	FCC Waste Services (UK) Limited
Activity address	Bletchley Waste Processing Facility Guernsey Road Bletchley Milton Keynes Buckinghamshire MK3 5JU
National grid reference	SP 86858 32153

2.1.5 In the context of this report, 'the Site' refers to all of the land within the green permit boundary as shown on attached drawing ref. 6089-CAU-XX-XX-DR-V-1801.

2.1.6 The area covered by this SCR Addendum is the same area of land previously covered in the original SCR and permit ref. EPR/FB3530RC and it is not proposed to change the existing permit boundary as a result of this permit variation.

2.2 Site plans

2.2.1 Site plans showing details of the Site and its surroundings are attached to the following listed reports as part of the permit application. No extra land will be added to the permitted area as a result of this permit variation.

2.2.2 The list of drawings and the reports they are contained within in the application are provided in Table 2 below:

Table 2 - List of Drawings

Drawing number	Drawing title	Document
6089-CAU-XX-XX-DR-V-1801	External Site Layout	Operating Techniques & BAT Review report ref. 6089-CAU-XX-XX-RP-V-0303
6089-CAU-XX-XX-DR-V-1801	Internal Site Layout	
6089-CAU-XX-XX-DR-V-1800	Sensitive Receptors Plan	Environmental Risk Assessment ref. 6089-CAU-XX-XX-RP-V-0302

3.0 CONDITION OF THE LAND AT PERMIT ISSUE

3.1 Overview

3.1.1 Since permit issue, there have been no changes to the condition of the land (environmental setting pollution history, historic contamination, or baseline soil and groundwater reference data) due to the concrete site surfacing and building being present the entire time. Therefore, no updates to the condition of the land is considered necessary as part of this permit variation application.

4.0 PERMITTED ACTIVITIES

4.1 Permitted Activities

4.1.1 The Site currently has a waste operation permit ref. EPR/FB3530RC for the operation of a non-hazardous household, commercial and industrial waste transfer station, managed by FCC Waste Services (UK) Limited. The operations under this activity include physical treatment of wastes (manual sorting, separation, screening, baling, shredding, crushing and compaction) within the building and storage of recyclables ready for export, and also bulking of residual organic fractions for use as RDF off-site. These operations are no longer active at the Site, but the operator wishes to retain this activity on the permit for future use.

4.2 Proposed Permitted Activities

4.2.1 As part of this permit variation application, the Operator proposes to add a new listed Section 5.3 activity to Table S1.1 of the permit for the physico-chemical treatment of more than 10 tonnes per day of hazardous asbestos-contaminated soils. This activity, along with the temporary storage of the hazardous soils (Section 5.6 activity) is to be undertaken within the existing building, which provides shelter from the weather and already has impermeable paving and sealed drainage installed.

4.2.2 It is proposed to add the following listed activities to the existing permit:

- Section 5.3 Part A(1)(a)(ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment; and,
- Section 5.6 Part A(1)(a) – Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2 and 5.3.

4.2.3 This application also proposes two new hazardous waste codes to be included in the permit for the acceptance and treatment of bonded asbestos contaminated soils:

- 17 05 03* soil and stones containing hazardous substances.
- 17 06 05* construction materials containing asbestos.

4.2.4 Soils with visible ACM are sent by producers with waste codes 17 05 03* and 17 06 05* and are frequently dual coded with 17 05 04 and will be restricted to those wastes which contain identifiable pieces of bonded asbestos – any particle size that can be identified as potentially being asbestos by a competent person if examined by the naked eye..

4.2.5 Hazardous soils containing bonded asbestos debris will undergo pre-acceptance checks, a pre-screening process and hand-picking of asbestos cement fragments, before being tested and then used in restoration of Bletchley Landfill.

Screening Operations

4.2.6 A mechanical screener will be used to remove oversize material from asbestos cement containing soils. Soils will be screened using a three-way screener. The screened material is then passed through the picking station to allow the removal of any bound asbestos debris. This is to remove larger items (e.g. lumps of concrete) to reduce the potential of damage to the picking station and make hand picking of asbestos debris more effective.

4.2.7 The screener used at the Maw Green soil treatment facility was unmodified. Trials on partially enclosed screeners with a HEPA filter and uncovered screeners with general dust suppression have shown no difference in emissions as they all meet the method detection limit of <0.0005f/ml. The use of standard dust suppression with a propriety surfactant has been shown to be entirely effective as secondary mitigation to the waste acceptance criteria.

4.2.8 Where SEM testing is undertaken this will ensure that the asbestos concentrations in air are below 0.0005f/ml. This approach and reduced detection limit for the asbestos monitoring meets the well-established principle of reducing emissions to be as low as reasonably practicable.

Asbestos Picking Station

4.2.9 The asbestos picking station will be a mobile enclosed unit and will be identical to the type approved for use under an environmental permit at the operator's other sites.

4.2.10 Airborne asbestos concentrations have been monitored both within, and directly adjacent to the picking station at the operator's other sites. There is no increase in asbestos concentrations above the method detection limit of either <0.01f/ml or <0.0005f/ml within the internal atmosphere of the soil screeners or picking stations monitored, nor ambient air immediately outside of the screener/picking station. This monitoring has been undertaken since the operator commenced the treatment of bound asbestos contaminated soils. All air monitoring data has been submitted to the Environment Agency and approved as being compliant with the site's permit for each site (Maw Green Landfill Mobile Plant, Maw Green Installation Permit and Edwin Richards Quarry Mobile Plant).

4.2.11 Notwithstanding the substantial evidence that there are no elevated airborne asbestos emissions within the screening plant or picking stations of the above sites, as an additional control measure, there will be a series of spray rails on the incoming and outgoing conveyor to effectively capture and contain particulate emissions. This would act as secondary containment for any particulate emissions.

4.2.12 The operations are to be undertaken within the existing building purely as a convenient use of existing space and shelter from the weather, with the proposed control measures to prevent release of airborne asbestos proven to be effective at other sites and the building is not intended to be a primary control measure for preventing airborne asbestos emissions leaving the site.

4.2.13 The out-going conveyor will drop the hand-picked picked processed soils, and the drop height will be minimised to reduce any agitation of the soils. A dust suppression system (using a water and proprietary asbestos surfactant solution) will be in place at the site that will consist of misting sprays with overlapping spray arcs, identical to the approved suppression system on the operator's other sites that can be used to continually dampen stockpiles during loading and unloading activities.

4.2.14 The process in the picking station will involve a manual sorting process by trained operatives who will remove visible fragments of asbestos from the materials from the conveyor. Asbestos picked from the conveyor will be placed by hand in individual polythene bags located inside the picking station beside the trained operatives. When the bags are either full, or the end of the working day is achieved, the polythene bag will be placed into a second bag and sealed using a taped swan neck. The double bagged asbestos will be taken outside and placed by hand into the on-site enclosed lockable asbestos skip. Used PPE from the picking station and direct working areas will be double bagged using the same approach as asbestos containing material (ACM) debris and placed into the enclosed lockable asbestos skip.

4.2.15 A Category B trained supervisor will regularly check the labelled, lockable asbestos waste skip and will arrange for the collection and delivery of new asbestos skips when the existing skip has reached 75% capacity. This is to ensure that there is no risk of the skip becoming over capacity and unable to accept further bagged asbestos. This will form part of the daily site checks.

Post-treatment Storage and Verification

4.2.16 The out-going conveyor from the asbestos picking station will deposit the hand processed soils into a separate stockpile labelled as treated soils. The stockpile within this designated area will then undergo further visual inspection by the suitably trained/qualified member of staff for any residual asbestos containing fragments. If any bonded asbestos fragments are encountered, the materials will be re-loaded into the asbestos picking station and processed until no visible bonded asbestos fragments are observed through visual inspection.

4.2.17 The materials will then undergo 'Post Treatment Verification Sampling' testing and sampling will confirm that treated soils meet the restoration soil quality targets to enable their use in the restoration area of Bletchley Landfill Site. If, after the receipt of laboratory analysis results, the soils do not meet the acceptance criteria, the soils will either be treated further or removed from site to an alternative disposal facility.

4.2.18 Following screening, the soils will be stockpiled for use in recovery at the landfill site.

4.3 Non-Permitted Activities

4.3.1 It is not proposed to undertake any non-permitted activities at the site, and there are none currently undertaken.

4.4 Relevant Documents

4.4.1 The following plans show the proposed area where the asbestos-contaminated soils will be stored and treated within the building at Bletchley Waste Processing Facility:

- 6089-CAU-XX-XX-DR-V-1801 External Site Layout Plan
- 6089-CAU-XX-XX-DR-V-1801 External Site Layout Plan

4.4.2 An Environmental Risk Assessment (ERA) has been produced to consider the potential risks of odour, noise, vibration, dust, fugitive emissions and accidents for the proposed new activity and this is included in this permit variation application s document ref. 6089-CAU-XX-XX-RP-V-0302. A Sensitive Receptor Plan has also been produced and this is attached to the ERA as drawing ref. 6089-CAU-XX-XX-DR-V-1800.

4.4.3 Full details of the proposed storage and treatment of asbestos-contaminated soils activity to be undertaken at Bletchley Waste Processing Facility is included within the process description and Best Available Techniques (BAT) Review in the 'Operating Techniques & BAT Review' report ref. 6089-CAU-XX-XX-RP-V-0303, included within the permit variation application.

4.4.4 In addition, further dust control measure and monitoring details are included within the Dust & Emissions Management Plan ref. 6089-CAU-XX-XX-RP-V-0304 for the proposed activity.

5.0 CHANGES TO THE ACTIVITY

5.1 Have there been any changes to the activity boundary?

5.1.1 No, the permit boundary will remain the same as currently permitted in permit ref. EPR/FB3530RC as a result of this permit variation application. This is shown in drawing ref. 6089-CAU-XX-XX-DR-V-1801 'External Site Layout'.

5.2 Have there been any changes to the permitted activities?

5.2.1 There are no proposed changes to the existing permitted activities for the acceptance of non-hazardous wates for the production of Refuse Derived Fuel (RDF) within the permit and no changes to Directly Associated Activities or previously approved management systems documents associated with this activity.

5.2.2 This permit application concerns adding an additional activity to the permit to allow for the storage and treatment of hazardous waste soils impacted by hard-bound asbestos which consists of hand-picking and screening by 3-way screener asbestos contaminated soils. This will be undertaken on impermeable concrete surfacing and will be located within the existing building on-site. See Section 4.2 above for an overview of the proposed new activities.

5.2.3 Further details of the proposed storage and treatment of asbestos contaminated soils activity to be undertaken at Bletchley Waste Processing Facility is included within the process description and Best Available Techniques (BAT) Review in the 'Operating Techniques & BAT Review' report ref. 6089-CAU-XX-XX-RP-V-0303, included within the permit variation application.

5.3 Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of permitted activities?

5.3.1 No, the Operator is not aware of any 'dangerous substances' having been used or produced as a result of permitted activities. The permitted activity for processing of non-hazardous wastes and production of RDF did not produce or use any 'dangerous substance' being non-hazardous, and all operations were undertaken on the impermeable site surfacing, with appropriate actions taken to ensure leaks and spillages of substances such oils and fuels from mobile plant were contained and quickly cleaned up if they occurred.

5.4 Stage 1-3 Assessment – Relevant Hazardous Substances

Stage 1 – Identify Substances on site

5.4.1 Stage 1 requires the identification of substances used, produced or released on site. These have been identified as the following:

- Bound Asbestos
- Asbestos surfactant additive
- Oils and fuels for plant

Stage 2 – Identify Relevant Substances

5.4.2 The potential pollutant risks of the substances identified in stage 1 has been determined by considering the respective chemical and physical properties. This information has been used to determine whether the substance have the potential to cause pollution of soil and groundwater and is therefore a Relevant substance. This is summarised in table 3 below:

Table 3. Summary of pollution potential

Substance	Classification	Physical State	Solubility	Toxicity	Mobility	Persistence	Soil and groundwater pollution potential	Relevant Substance*
Bound Asbestos	Not toxic when cement bound.	Solid	Not soluble	Not toxic when bound	Not mobile.	Not biodegradable	Limited soil and groundwater pollution potential	N
Asbestos surfactant additive	Toxic to aquatic life	Liquid	Soluble	Toxic to aquatic organisms, toxic to soil organisms	Readily absorbed into soil	Not biodegradable	Potential to pollute soil and groundwater	Y
Oils and fuels for plant	Flammable, irritant, toxic to aquatic life	Liquid	Not soluble	Toxic to aquatic organisms	Readily absorbed into soil	Biodegradable	Potential to pollute soil and groundwater	Y

*Relevant hazardous substance and/or substance with pollution potential with respect to soil and groundwater

Stage 3 – Assessment of site specific pollution possibility

5.4.3 The site-specific pollution possibility has been assessed for each of the relevant substances identified in stage 2. This assessment considers whether the relevant substances pose a pollution risk when taking into account the site specific prevention measures and whether they are fit for purpose. This is summarised in table 4 below.

Table 4 – Summary of pollution risk

Relevant Substance	Amount used annually	Maximum amount stored at the site	Details of existing pollution prevention measures	Pollution risk Yes/No
Asbestos surfactant additive	Approximately 0.025 litres used per tonne of treated soil. Maximum of 2,500 litres per year.	250 litres	Soil storage and treatment area is constructed from smooth impermeable concrete surfacing. Sealed drainage with penstock valves will ensure any spillages or leaks is contained and not allowed to leave site or infiltrate into the ground. Spill kits will be available around site in the event of a spillage and trained site staff will ensure spillages are cleaned up quickly and safely. Site surfacing will inspected daily to check for integrity or evidence of cracks, and is maintained as part of the routine management of the site. Storage vessels and containment systems for hazardous liquids will be in line with the CIRIA 'Containment systems for the prevention of pollution: Secondary, tertiary and other measures for industrial and commercial premises (C736;2014). Bunding will be provided to a minimum of 110% capacity.	No
Oils and fuels for plant	Approximately 0.5 litres per tonne of soil treated. Maximum 50,000 litres per year.	5000 litres	Use of diesel will be undertaken in accordance with the sites management system procedures. All fuels and tanks will be appropriately stored and bunded 110% of their capacity and be compliant with CIRIA 'Containment systems for the prevention of pollution: Secondary, Tertiary and other measures for industrial and commercial premises' (C736, 2014). Soil storage and treatment area is constructed from smooth impermeable concrete surfacing. Sealed drainage with penstock valves will ensure any spillages or leaks is contained and not allowed to leave site or infiltrate into the ground. Spill kits will be available around site in the event of a spillage and trained site staff will ensure spillages are cleaned up quickly and safely. Regular inspections will be carried out that check for integrity of site surfacing, integrity of mobile plant and correct storage of fuel.	No

APPENDIX 1

2012 Site Condition Report

Report: WR7052/03
Date: September 2012

SITE CONDITION REPORT

WASTE PROCESSING FACILITY
AT BLETCHLEY LANDFILL SITE
BLETCHLEY, MILTON KEYNES

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Project Quality Assurance
Information Sheet

SITE CONDITION REPORT
WASTE PROCESSING FACILITY (BLETCHLEY LANDFILL SITE)

Report Number	:	WR7052/03	*Report Status*	:	Final
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WASTE PROCESSING FACILITY, BLETCHLEY LANDFILL SITE BLETCHLEY, MILTON KEYNES

SITE CONDITION REPORT

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1.0 INTRODUCTION

1.1 Scope

1.1.1 Stratus Environmental Limited has been commissioned by FCC Waste Services (UK) Ltd (FCC) to prepare and submit an Environmental Permit application for a Waste Processing Facility (WPF) at the existing waste reception compound, Bletchley Landfill Site, Milton Keynes. The application is submitted in accordance with the Environmental Permitting (England & Wales) Regulations 2010 (as amended) (referred to hereafter as the EP Regulations).

1.1.2 The Site Condition Report has been compiled in accordance with the EP Regulations and with Horizontal Guidance Note 5, Site Condition Reports – Guidance and Templates. Information has been gathered from a number of sources including existing site investigation reports, photographs, and findings of site visits and observations made by Stratus.

1.1.3 The purpose of the initial Site Condition Report is to provide a factual statement of the condition of the site at the time of the Environmental Permit application. The Site Condition Report must describe the nature and distribution of potentially polluting substances in the ground and groundwater at the site. The potentially polluting substances of interest are those which are to be handled at the site under the Permit, and include raw materials, waste materials and by-products that are generated by the process.

1.2 Site Location

1.2.1 The proposed site for the Waste Processing Facility is located to the southern extent of the existing waste reception compound located at the eastern boundary of the Bletchley Landfill complex (see **Drawing WR7052/8/SCR01**). The National Grid Reference for the approximate centre of the site is: 486950 232150.

1.2.2 The area covered under this Site Condition Report is illustrated on Drawing **WR7052/5/SCR02**. In summary, the facility is bounded by the existing landfill operations to the west, the access road, office and car park to the north, New Covert woodland to the south and unused agricultural land to the east. The West Coast Mainline embankment is located approximately 200m to the east. Nearby land uses consist of the Blue Lagoon Park to the north and agricultural land to the south. Planning permission has been granted for mixed use development of the area known as 'Newton Leys' to the south of the site, which will provide 1,650 houses and 70,000m^2 of industrial development, community and recreation uses. The latest masterplan for the Newton Leys mixed use development has the employment uses located to the north and residential properties on the southern part of the site, ~400m from the proposed development.

1.2.3 The site access follows the existing access road to the existing Bletchley Landfill Site. This new access was constructed in 2008 and provides direct access to the A4146.

1.2.4 The closest existing residential properties to the application site boundary are located on Drayton Road approximately 300 meters to the south east; however, these are separated by the West Coast Mainline embankment.

2.0 CONDITION OF LAND AT PERMIT ISSUE

2.1 Geology & Hydrogeology

2.1.1 The local geology has been identified from the review of BGS 1:50,000 scale geology maps.

2.1.2 The BGS geological maps indicate that the northern half of the site is underlain by Mid-Pleistocene age Glacial Till (Boulder Clay) whilst the southern half is underlain by Glaciolacustrine deposits (clay and silt) of similar age.

2.1.3 Beneath the superficial deposits exists the Upper Jurassic Oxford Clay Formations (mudstones). This formation overlays sequentially the Kellaways Sand and Blisworth Clay and Limestone formations.

2.1.4 The superficial deposits and Oxford Clay bedrock formations beneath the site are classified as non-aquifers. The Kellaway Sand and Blisworth Limestone formations are classified as minor and major formations respectively. The site is not located within a source protection zone, the nearest being ~3km to the east of the site.

2.1.5 It should be noted that whilst the site appears to lie within an area registered as a historic landfill site, the area within the reception compound has never been landfilled. Historic maps of the area clearly show that clay extraction did not extend to this area and thus infilling has never occurred. The licence to landfill has been subsequently replaced by the existing Environmental Permit which does not extend the landfilling operations over this area.

2.2 Hydrology

2.2.1 The nearest surface water feature to the development site is the Water Eaton Brook. Its source is a reservoir at Hounslow Hall, approximately 3km southwest of the site. From here the brook flows northeast to within 1km of the site's southern boundary before meandering north to within approximately 150 metres of the site's eastern boundary, and into the lakes/lagoons of the Blue Lagoon Park conservation area. Watercourses then continue to flow east for approximately 1.2km where the watercourse converges with the River Ouzel, which flows north to south on the eastern extents of Bletchley.

2.2.2 Other surface water features within 1 km of the site includes the Great Union Canal that runs parallel to the River Ouzel and several lagoons associated with the adjacent landfill activities which their outflows convergence with the outflows from the lakes in the Blue Lagoon Park.

2.2.3 EA records confirm that one pollution incident to controlled waters has occurred within 1km of the site. This consisted of the release of oils and fuels in March 2005 into the lagoon in the northern extents of the Blue Lagoon Park, which resulted in a 'significant' impact on the water environment.

2.2.4 Within 1 km of the Bletchley landfill complex there are a total of three discharge consents. One relates to an unspecified agricultural discharge, another to a sewage network discharge and the third to a domestic (single dwelling) sewage discharge.

2.2.5 The river water quality of the River Ouzel at its convergence point with the Hounslow Hall reservoir tributary are afforded chemical and biological grades of B (Good), based on EA monitoring results for the year 2009.

2.2.6 The site and the wider region are designated as a Nitrate Vulnerable Zone (NVZ) area.

2.3 Designated Conservation Areas

2.3.1 One statutorily designated site of nature conservation interest is present within 2 km of the site boundary. Blue Lagoon Local Nature Reserve (LNR) is located approximately 20m to the north of the site boundary and designated for its variety of habitats including two lakes with well-vegetated margins, areas of grassland, scrub, and bare ground. There are no Sites of Special Scientific Interest (SSSI) within 2km of the site. Similarly there are no Special Areas of Conservation (SAC), Special Protected Areas (SPA), or Ramsar Sites were present within 5 km.

2.3.2 Buckinghamshire and Milton Keynes Environmental Records Centre have provided details of several non-statutory designated sites within close proximity of the site. A summary of the non-statutory site is presented in Table 1.

Table 1: Non-statutory sites of nature conservation interest within 2km of the site

Site	Designation	Distance and direction from site	Description
Newton Longville Brickpits	Biological Notification Site	15m west	Not available – former brickworks site
Blue Lagoon	Biological Notification Site	20m north	Large area covering a variety of habitats. Two lakes (Blue Lagoon & Newfoundout) are well-vegetated around margins and attract numbers of birds. Areas of grassland, scrub and bare ground support many plants and invertebrates, including rare species.
Jubilee Works (Excluding Jubilee Pit)	Biological Notification Site	700m south	Brickworks
Jubilee Pit	Biological Notification Site	800m south	Water-filled, former brickpit

Site	Designation	Distance and direction from site	Description
Ex-brickfield Scrub	Biological Notification Site	900m southwest	Mixture of calcareous grassland, wet areas and shrub. Former brickfield
Newton Longville Brickworks	Biological Notification Site	1,100 west	Brickfields with spoil heaps and stream. Many species of fossil have been found at this site, especially ammonites

2.3.3 Buckinghamshire and Milton Keynes Environmental Records Centre have also provided details of two Milton Keynes Wildlife Railway Corridors which are given a status equivalent to Local Wildlife Sites in the Milton Keynes Local Plan, the corridors are present to the north and east of the site (200m at the closest point) and considered to be an important resource for the local fauna.

2.3.4 Searches of the National Biodiversity Network (NBN) Gateway and information provided by the records centre have highlighted a number of protected and Biodiversity Action Plan (BAP species within 2 km of the site boundary. These include numerous records within the nearby LNR and Biological Notification Sites (BNSs) for grass snake *Natrix natrix* and great crested newt *Triturus cristatus*, as well as abundant bird and invertebrate species (Figure 1). North Buckinghamshire Bat Group has provided details of a several bat sightings and bat roosts within the local area. These include known common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared *Plecotus auritus* roosts approximately 1 km to the north east and south west of the site. A number of badger sightings have been reported from the records centre however no details of current setts are held.

2.3.5 The locations of all designated habitats sites within 2 km of the application site are illustrated on **Drawing WR7052/5/SCR03**.

2.4 Site History

2.4.1 Available historic maps (**Appendix A**) indicate that the waste reception compound and most of the access road have been in agricultural use. However, the southernmost part of the access road crosses former railway sidings at the western end of the former Jubilee Brickworks, which was operational from the 1930's to 1978. The sidings have since been removed.

2.4.2 Prior to mineral extraction, the land that now comprises Bletchley Landfill Site was used for agriculture. Clay extraction for brick making was carried out at the site for much of the 20th Century and was worked most recently (1956-1990) by London Brick Company Limited. Excavation took place to depths of about 25 to 30m, through the weathered Oxford Clay (Callow) and into the unweathered Oxford Clay (Knotts).

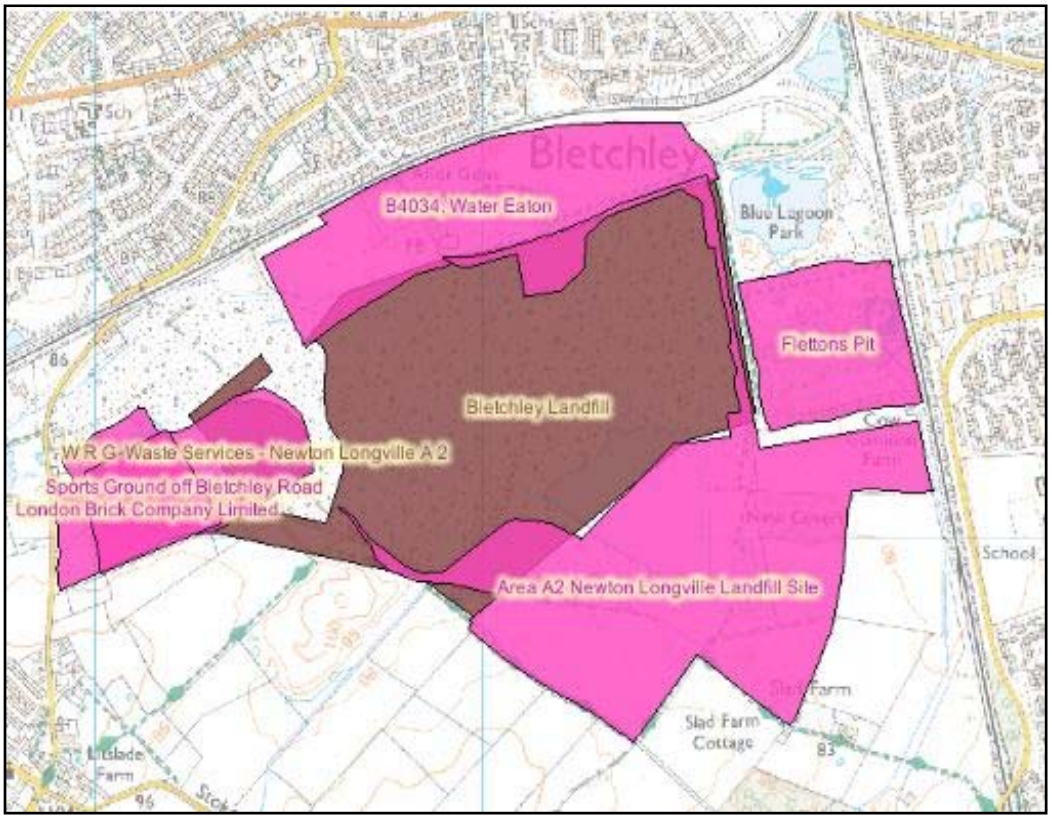
2.4.3 Filling of part of the excavations with imported waste by the Local Authority commenced by the start of the 1970's. These operations were subsequently taken over by the then landowners, the London Brick Company. Shanks acquired the landfill site in 1984 and Waste Recycling Group acquired the site from Shanks in June 2004.

2.4.4 A review of Environment Agency records indicates a total of 7 registered active and historic landfills within the Bletchley Landfill complex. The record details are summarised in **Table 2**. The areas covered by each record are shown in **Figure 1**.

Table 2: EA registered landfill site records in Bletchley complex

Site (Operator)	Specified Wastes	Licence Status	Date
Historic Landfill Sites			
Area A2 Newton Longville Landfill Site (Shanks & McEwen)	None Specified	Inactive	None Specified
Flettons Pit	Household, commercial and industrial	Inactive	1979-1989
B4034, Water Eaton (London Brick Company)	None Specified	Inactive	None Specified
Sports Ground off Bletchley Road	Inert, household, commercial and industrial	Partially active with WRG	1969-1994
London Brick Company Ltd (Bletchley Urban District Council	Commercial	Inactive	1968 - unspecified
Active Landfill Sites			
Bletchley Landfill (WRG Ltd)	Household, Commercial and Industrial	IPPC (Modified)	None Specified
Newton Longville A2 (WRG Ltd)	Non-hazardous	IPPC	None Specified

Figure 1: EA registered landfill site areas in Bletchley complex



**Source: www.environment-agency.gov.uk*

2.4.5 Whilst the site appears to lie within an area registered as a historic landfill site, recent investigation (**Appendix B**) indicates that the area within the reception compound has never been landfilled. Furthermore, historic maps (**Appendix A**) of the area clearly show that clay extraction did not extend to this area and thus infilling has never occurred. The licence to landfill has been subsequently replaced by the existing Environmental Permit which does not extend the landfilling operations over this area.

2.5 Site Investigation & Assessment Reports

2.5.1 A site investigation was commissioned by the applicant in March 2012 to discharge relevant conditions of the facility's planning consent and is included at **Appendix B**. The investigation consisted of an initial desk study review of historical OS maps followed by an intrusive site investigation using a combination of trial pits and boreholes (shell and auger techniques). Whilst some made ground was identified in the non-operational western area of the site, the investigation revealed that the main operational areas of the facility consist of virgin ground, with some disturbed soil present within the surface horizon at the eastern area of the site. With the exception of some occasional wire fragments in the surface soil horizon, no visual contamination was evident in the operational areas of the site. No laboratory analysis was undertaken as part of this investigation.

2.6 Baseline Data

2.6.1 Recent investigation of the site indicates at the site is located on virgin ground (**Appendix B**). No laboratory analysis was undertaken as part of the investigation of the site and as such no baseline data is available at the application stage, although based upon observations made during the fieldworks that the site is underlain by virgin ground, contamination is highly unlikely.

3.0 PERMITTED FACILTY

3.1 Permitted Activities

3.1.1 An application has been made to the Environment Agency under the Environmental Permitting (England & Wales) Regulations 2010 (as amended), to undertake the following permitted activities at the facility:-

- Bespoke Environmental Permit for a Waste Processing Facility including the physical treatment of waste by means of manual and mechanical sorting, separation, screening, shredding, crushing and compaction of waste into different components for recovery or disposal.

3.1.2 The facility will treat *circa.* 100,000tpa of non-hazardous wastes from a range of household, commercial and industrial sources. Wastes will be stored internally, within a fully enclosed building on impermeable concrete pavement linked to a sealed drainage system. External storage will be limited to inert waste and baled/containerised recyclates and WEEE.

3.1.3 The main emissions from the facility include point source emissions to control waters from sites surface water drainage system which collects and discharges waters all external impermeable service areas and roofs via inline oil separators and balancing ponds.

3.2 Non-Permitted Activities

3.2.1 The waste facility will be supported by office, welfare and car parking facilities which will not be subject to the requirements of the Environmental Permit.

3.3 Polluting Substances

3.3.1 A number of raw materials, waste and by-products will be used, produced and stored onsite during the processing of waste materials. An inventory of materials is included in **Table 3** below. An assessment of their pollution potential has been made based upon their properties, toxicity, and volume stored, used or manufactured.

Table 3: Risk assessment of potentially polluting substances

Substance	Chemical composition	Quantity	Environmental behaviour and fate	Potential Environmental Impact	Storage arrangements	Assessment of Alternatives
Non-hazardous wastes	Various	100,000tpa	Potential for leachate to be generated. Light fractions potential to generate litter. Degradation of organic fraction. Dust generated by dry materials	Contamination of land and controlled waters and health impacts to end users. Visual impact of windblown litter with potential hazards to wildlife. Odour generation from degrading materials likely to cause complaint (nuisance). Dust causing nuisance to site workers, visitors and neighbouring land users.	Deliveries and dispatch of pre- and post-treated wastes to be undertaken by enclosed or sheeted vehicles. All waste storage and treatment operations to be undertaken internally on impermeable concrete pavement with a sealed drainage system. Storage durations kept to a minimum and general housekeeping measures to be implemented in all storage treatment areas to minimise odour generation	None - waste material forms primary purpose of facility.
Grease/oil	Hydrocarbons with trace additives	Not known - likely to be <1000 litres / yr	Insoluble and floats on water. Low biodegradation in soil. Fate is ultimately 100% to air - low volatility	Contamination of land and controlled waters and health risk to end users (i.e. humans, wildlife)	All containers to be stored in designated areas with impermeable surfacing and drip/spills trays. Spill kits to be located in strategic locations across the facility.	Essential for operation of various items at the facility. No readily available alternatives with equivalent properties exist.
Detergent	Synthetic chemical compounds	Not known - likely to be <1000 litres / yr	Toxic to aquatic environment	Eutrophication of aquatic environment Toxic to aquatic life	All containers to be stored in designated areas with impermeable surfacing and drip/spills trays. All areas where detergents to be utilised to be serviced by a sealed foul drainage system	Use of less persistent/biodegradable detergents where appropriate

3.4 Preventative Measures

3.4.1 The primary mitigation from potential pollution is the engineered containment for the stored materials, in the form of secure container storage and associated appropriate levels of bunding, sealed drainage and impermeable site surfacing. In addition emergency procedures are in place to deal promptly with any spillage of dangerous substances onsite. Further details are included in Sections 4.0 and 5.0 of the Management Plan (**Document Reference WR7052/02**).

4.0 STATEMENT OF SITE CONDITION

4.1.1 The limited development history on the proposed site indicates that the baseline conditions of the site soils are unlikely to consist of significantly elevated concentrations of contaminants.

4.1.2 Throughout the life of the permit all containment systems will be inspected and maintained to the recommended programme.

4.1.3 Records of all environmental incidents on- and off-site which are likely to have an impact on the land will be maintained for the life of the permit, with appropriate investigations implemented to determine the extent of any such incidents.

4.1.4 Consequently, the collection of reference data is not considered a requirement at the permit application/issue phase of the facility.

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