Caulmert Limited

Engineering, Environmental & Planning
Consultancy Services

New Inn Transfer & Recycling Centre

FCC Recycling (UK) Ltd

Environmental Permit Variation Application

Site Condition Report

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Caulmert
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APPROVAL RECORD

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DISCLAIMER

SITE CONDITION REPORT

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1.0 INTRODUCTION

1.1 Background

1.1.1 A revised layout is proposed for the Household Waste Recycling Centre (HWRC) comprising a relocated split level facility with new site office. This includes an area of additional land to be included within the permit boundary.

1.1.2 As part of the permit application, this site condition report has been produced in accordance with NRW guidance.

1.2 Template for Site Condition Reports

1.2.1 The NRW use the Environment Agency guidance on Site Condition Reports (horizontal guidance note H5) which 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.

1.2.2 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.

1.2.3 To support the permit application to extend the permitted area, sections 1 to 3 of the Environment Agency's Site Condition Report Template is addressed below. The text in *italics* is copied from the template as this is the Environment Agency guidance on what should be included.

2.0 SITE DETAILS

2.1 Operator and site location

2.1.1 The details of the operator and the site are as follows:

Name of operator	FCC Recycling (UK) Ltd
Activity address	Panteg Way New Inn Pontypool Torfaen NP4 0LS
National grid reference	ST 29655 99760 (centre of Site)

2.1.2 In the context of this report, 'site' refers to all of the land within the proposed permit boundary.

2.1.3 The site consists of a site office with amenity facilities and external areas comprising of waste and recyclates storage/segregation areas, HWRC, baling plant, car parking, and reception area.

2.1.4 Whilst a Site Report is required for the additional area of land to which the permit variation relates, the whole site has been included for completeness.

2.1.5 The proposed permit boundary and site layout and additional area can be seen from drawing 2507.VAR.02 presented within the application.

2.2 Site plans

(Note: In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- *Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.*
- *Locations of receptors, sources of emissions/releases, and monitoring points.*
- *Site drainage.*
- *Site surfacing*

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.)

2.2.1 Site plans showing details of the site and its surroundings are included as part of the permit application for the facility. The list of drawings included in the permit application is provided in the table below.

Drawing number	Drawing title
2507.VAR.01	Site Location
2507.VAR.02	Site Layout and Permit Boundary
2507.VAR.03	Receptors Drawing

2.2.2 These drawings are not replicated within this report; reference should be made to the drawings section of the environmental permit application.

3.0 CONDITION OF THE LAND AT PERMIT ISSUE

3.1 Site Location

3.1.1 The site is situated in New Inn, west of Afon Lwyd River. The site boundary for the new extension area and the initial site lies within an industrial estate west of the centre of the town.

3.1.2 The Ordnance Survey National Grid reference at the approximate site centre is ST 29655 99760.

3.2 Environmental setting

(Environmental setting including:

- *geology*
- *hydrogeology*
- *surface waters)*

3.2.1 The information presented within this section is based primarily on information obtained from the GroundSure report which is included separately in this application.

Geology

3.2.2 The superficial geology on site consists of: river terrace deposits comprising sand and gravels and alluvium comprising clay, silt, sand and gravel. The underlying bedrock consists of St Maughans Formation, described as argillaceous rocks and sandstone, interbedded and the Ragland mudstone formation, described as mudstone and sandstone interbedded.

3.2.3 There are no records of any artificial or made ground within 500m of the site boundary.

Mining

3.2.4 A Coal Mining area is identified in the GroundSure report 585m west of the site; from the historical maps Cwm Quarries can be identified in this location and ‘Old Quarries’ are evident.

3.2.5 Some small scale mining occurred from 59m north of the site for vein mineral.

3.2.6 There is no evidence of mining within the permitted site boundary itself based on historical map data.

Hydrogeology

3.2.7 There are no Source Protection Zones within the vicinity of the site.

3.2.8 The GroundSure report classifies the bedrock and superficial deposits as “Secondary A Aquifer”. These are permeable layers capable of supporting water supplies at a local rather than strategic scale and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

3.2.9 No groundwater abstraction licenses are present within 1 km of the site.

Surface waters

3.2.10 The nearest named watercourse is the Afon Lywd which runs 50m to the east of the site, defined as a Primary River.

3.2.11 The Monmouthshire and Brecon Canal which runs 360m to the west of the site is classified as a canal.

3.2.12 The water quality in the Afon Lwyd when monitored approximately 700m from site was graded C terms of biology and B when recorded further away, 1214m northwest, on a scale from A to F (‘very good’ – ‘bad) in 2009.

3.2.13 There is no chemical data available for 2009, the most recent recordings show the chemical quality to be graded as B in the Afon Lwyd approximately 700m away from the site. Water quality in the Monmouth Brecon canal at the closest monitoring point to the site 474m to the north was graded E in 2008.

3.2.14 All drainage on site passes through three stage interceptors. See drainage plan 2507.VAR.04 for further details.

3.2.15 There are two listed surface water abstraction licenses within 1km, the nearest 631m west of the site and another 825m south west.

3.2.16 There are no potable water abstraction licences within 1km of the site.

3.2.17 Environment Agency flood maps show the site not to be in a flood risk zone although the eastern side lies adjacent to a zone 3 floodplain, due to the presence of the Afon Lwyd River.

3.3 Pollution history

(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.)*

Old Landfills

3.3.1 The GroundSure investigation shows that north east of the site, east of the river, lies a site labelled as a historic and planned waste site.

3.3.2 A historic landfill, defined by the Environment Agency lies south east of the site just outside the 250m boundary.

3.3.3 Three historic landfill sites are reported outside of the 500m boundary, all of which stopped operating before 1997.

Pollution incidents

3.3.4 The Environment Agency publishes data on reported pollution incidents which were categorised as either 'significant' or 'major'. The only incidents reported for the site in the GroundSure report are classed as 'minor' or 'no impact'.

3.3.5 Llandegfedd reservoir lies approximately 1.75 km east of the site and is a designated SSSI, recognised for its over-wintering wildfowl.

Historic land-uses

3.3.6 The Groundsure Report[1] for the development site identifies the following historic land uses.

3.3.7 At the time of the publication of the first map of the area in 1881 the area is undeveloped. The site lies partially within an open field (west) and woodland (east). Panteg Forge is located north east of the site boundary within 500m at this time. There is a railway line located west of the site which runs to the north east, with sidings and an engine shed located in close proximity to the site boundary. The Afon Lwyd River flows north to south to the east of the site.

3.3.8 To the south west of the site lies Pontypool workhouse, by 1900 this is shown as an Infirmary and then County Hospital. The 1900 plan also shows Panteg Forge is now disused.

3.3.9 Galvanising works are present north of the site in 1900 and can be seen up until the 1938 plan.

3.3.10 By 1922 a sewage tank is evident in the south of the 500m boundary in the space of open fields.

3.3.11 By the 1949 plan some gas works are evident within the site boundary in the south. By 1965 the gas works has expanded south of the site and more industrial works are apparent within the 500m site boundary with works in the north and north east.

GroundSure Enviroinsight Report, 16th November 2015. New Inn Project. Groundsure Location Intelligence. HMD-2591335.

3.3.12 By 1972 the historical plans shows the railway sidings to the west of the site has been predominantly dismantled. Some additional industrial works are evident to the east of the site with engineering works and a sausage factory commencing work.

3.3.13 In the 1989 plan there is the first evidence of a filling station 95m west of the site across from the railway line.

3.3.14 The 1993 plan shows the introduction of a council refuse depot within the site boundary, this is evident in all maps after this point.

3.3.15 The last plan viewed in 2014 shows a developed industrial estate to the east of the site with some works to the south and a factory to the west of the site within the 500m site boundary.

Evidence of existing or historic contamination

3.3.16 Based on the observations made in the site inspection it is considered that the underlying ground is likely to have been protected throughout the life of the existing site by the impermeable surfacing. There are no recorded incidents of spillages or pollution events.

3.3.17 Historic maps show the presence of an old gas works extending over part of the new HWRC area which may have given rise to historic contamination, however much of this area is now protected by tarmacked roads or concrete pavement.

Baseline soil and groundwater reference data

3.3.18 Based on the site inspection and proposed design details it is considered that the underlying ground is likely to be protected throughout the life of the site by impermeable surfacing.

3.3.19 Monitoring is therefore not considered to be required during the site operations.

4.0 PERMITTED ACTIVITY

4.1 Permitted activities

4.1.1 The permit allows the operation of a hazardous and non-hazardous Household, Commercial and Industrial Waste Transfer Station and Household Waste Recycling Centre. The total quantity of waste that can be accepted at a site must be less than 74,999 tonnes a year.

4.1.2 Activities permitted include

- Treatment consisting of compaction[1] and physical sorting or separation of waste into different components for disposal, recycling or reclamation.
- Storage of waste prior to disposal, recycling or reclamation.

4.1.3 The proposed permit activities will include a larger relocated household waste recycling centre (HWRC) comprising a large split level facility, and security office.

4.1.1 All areas of waste storage and treatment are carried out on concreted impermeable pavement with kerbing. New roadways are of tarmacadam construction.

4.1.2 All storage areas for waste materials are as shown on the Site Layout Plan 2507.VAR.02. Specific wastes will be handled and stored as detailed below.

HWRC waste incl other MSW & greenwaste

4.1.3 MSW will be deposited into hoppers within transfer station building and into waste compactors below. There are two waste compactor lines within the building, one of which is used for green waste during the summer period.

Mixed Kitchen Waste

4.1.4 This waste is stored in the designated storage bay within the waste transfer station building. The waste will be loaded into articulated vehicles or sealed containers using the site plant which will optimise payload.

Road Sweepings and Gulley Waste

4.1.5 This waste will consist of road sweepings and gully emptyings from highway maintenance, and will be discharged into the Sweeper Bay as shown on the site layout plan. The liquids draining from waste collect into the foul water drainage system. Drainage passes through a 3 stage interceptor before discharge to foul sewer under a trade effluent consent.

4.1.6 Solids are loaded into a container using the loading shovel prior to removal from the storage facility.

Mixed Dry Recyclables (MDR) and Paper

4.1.7 MDR will be deposited in designated storage areas within the waste transfer area. The waste will be loaded into bulker vehicles for offsite recycling.

Small WEEE

4.1.8 Small WEEE will be deposited in the designated containers within the HWRC. The WEEE will be loaded into bulker vehicles for offsite processing.

Gas Cylinders

4.1.9 Gas cylinders will be deposited in the designated storage area with the cylinders stored in an upright position in the gas bottle storage cage.

Televisions/CRT's

4.1.10 Televisions will be deposited in the ISO container on the HWRC. They will be stored placed upright by hand on the floor no more than two high prior to being loaded by hand into a collection vehicle on a regular basis for offsite reprocessing.

Refrigeration Equipment

4.1.11 Fridges and freezers will be deposited in the designated storage area on the external concrete. They will be stored in an upright position no more than two units high. The units will not be de-gassed on site and will be loaded by forklift onto a collection vehicle for offsite processing on a regular basis such that adequate storage space is available.

Tyre Storage

4.1.12 Tyres will be deposited in the designated container on the HWRC on the external concrete pad.

Miscellaneous hazardous wastes

4.1.13 Asbestos waste is temporarily stored in a locked enclosed container, Oil is stored in a self bunded tanks, fluorescent tubes are stored in dedicated container, Paint wastes and batteries are stored within dedicated plastic pallet boxes, all on impermeable pavement.

4.2 Site Drainage

4.2.1 All drainage on site passes through three stage interceptors, drainage from potentially contaminated areas or from the mess facilities drains to foul sewer, other areas drain to surface water. See drainage plan 2507.VAR.04 for further details.

4.3 Plan showing activity layout

4.3.1 The proposed site boundary and activity layout is shown on drawing 2507.VAR.02

4.4 Environmental risk assessment

4.4.1 An environmental risk assessment has been carried out to support the permit application; this is presented separately within the '*H1 Amenity and Accident Risk Assessment*' (document reference 2507.04.FCC.AGS.LS.A0). This report is based on H1 guidance Annex (a) and assesses the potential risks from odour, noise, fugitive emissions and accidents.

4.4.2 The risk assessments identify risk mitigation measures such as infrastructure, equipment or operational practices that are required to manage the risks from the site. Identified mitigation measures are incorporated as part of the management measures for the Site. The identified activities that will be conducted at the site which may lead to land pollution along with the identified preventative measures that are needed to be in place to protect the land are presented within Table 3 'Fugitive emissions' and within Table 4 'Accidents' of the above report.

4.4.3 There are no reports of any significant previous pollution incidents at the site.

5.0 REFERENCES

1. Environment Agency (2013). H5 SCR guide for applicants. Site condition report – guidance and templates. Version 3.0.

APPENDIX 1

Groundsure Report

November 2015

CD Copy Only

APPENDIX 2

Site Inspection Record

SITE INSPECTION RECORD

1.0 INTRODUCTION

Inspection details

1.1.1 The site inspection took place on 25th November 2015 by a Caulmert Limited employee. The inspection took the form of a site walk-over and a photographic record taken.

1.1.2 The site improvement works have now been completed and is now operational

1.1.3 The main purpose of the inspection was to assess the presence of potential pollution linkages that could result in contamination of the land from the current and historic activities. To that end, particular consideration was made of the surfacing and drainage systems with respect to the surrounding receptors.

1.1.4 Photographs were taken on the day of the inspection shows infrastructure development on site to date and current operations.

1.1.5 A summary of the previous, current operations is provided below. Details of the inspection along with photographs are presented in section 2.

1.1.6 The location and direction of where the photographs were taken is shown on drawing 2507.SCR 01.

Current/historic Site use

5.1.1 The historic uses of the site are described in section 3.3 of the main report.

5.1.2 From discussion with the site contracts manager was is understood that the operations carried out remain largely unchanged from the current permitted activities, however the site has been extended and the layout changed.

5.1.3 Additional hazardous wastes are to be added waste types permitted. These are currently accepted under S1 and S2 waste exemptions

5.1.4 The main changes to the layout are as detailed below:

a) Completely new Household Waste Recycling Centre (HWRC) within site offering increased recycling, and improved layout and traffic management.
b) Additional areas for sorting of waste for increased recycling.
c) New entrance and exit to HWRC
d) Increase area of permit to allow for improved HWRC
e) New surface water drainage scheme within HWRC draining to existing outlet into the Afon Lwyd
f) New foul water drainage around entrance and roadsweeper storage area.

5.1.5 All areas of waste storage and treatment are carried out on concreted impermeable pavement with kerbing. New roadways are of tarmacadam construction. Non-paved areas are mostly grassed with limited landscaping.

5.1.6 All drainage on site passes through three stage interceptors, drainage from potentially contaminated areas or from the mess facilities drains to foul sewer, other areas (incl HWRC area) drain to surface water. See drainage plan 2507.VAR.04 for further details.

5.1.7 An additional penstock valve will be installed to provide an additional control measure in the event of a spillage, fire or flooding. This will be installed at the start of the pipe work prior to it entering the first surface water chamber within the HWRC.

5.1.8 The roadsweeping wastes will continue be accepted within a specially constructed concrete bay sitting on the existing concrete pad. Potentially contaminated water draining from this bay is collected in a separate drainage system that will drain into the foul water sewer via a new connection.

5.1.9 Separately collected food waste is stored within a concrete bay within a building.

5.1.10 Storage arrangements for various difficult/hazardous wastes are as follows

- Asbestos waste is temporarily stored in a locked enclosed container
- Gas bottles are stored in a cage.
- Oil is stored in a self bunded tank
- Fluorescent tubes are stored in dedicated container
- Paint waste is stored within plastic pallet boxes
- Batteries are stored in plastic pallet boxes
- Fridges and freezers are stored on concrete impermeable surface
- CRTS are stored within containers.

5.1.11 All other wastes are stored within containers or concrete bays.

2 SITE INSPECTION

Figure 1: New HWRC roadway with adjacent hazardous waste storage under cover

Figure 2: Various container for recyclables

Figure 3: covered area for bulky/heavy wastes & non recyclable waste

Figure 4: Undercover storage for no recyclable waste

Figure 5: Clean water drainage from roof

Figure 6 surface water drainage

Figure 7 white goods storage area

Figure 8: paint waste storage

Figure 9: Oil storage containers

Figure 10: Battery boxes

Figure 11: Fluorescent tube storage

Figure 12: Site exit and grassed area

Figure 13: Exit

Figure 14: grassed area

Figure 15: carpet storage bay

Figure 16: Tipping hopper into compactors

Figure 17: Hard plastics storage

Figure 18: hardcore bay

Figure 19: Food waste bay

Figure 20: Roadsweeping waste bay

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