

CHESHIRE WEST and CHESTER (CWaC) SITE CONDITION REPORT FOR THE ELLESMERE PORT WASTE TRANSFER STATION



SITE CONDITION REPORT TEMPLATE

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	CHRIS Grimes (Kier Env. Manager)
Activity address	CWaC Waste Transfer Station, Kier MG Ltd, Dock Road Yard, Ellesmere Port, Cheshire, CH65 4EF
National grid reference	SJ 40950 76883
Document reference and dates for Site Condition Report at permit application and surrender	Bespoke permit application date:31/01/2015 (pre app ref: EAWML402072)
Document references for site plans (including location and boundaries)	CWaCKierMG Geo-environmental desktop study CWaCKierMG Ground Investigation Report CWaCKierMG Drainage Plan CWaCKierMG Proposed Site Plan CWaCKierMG Env Risk Assess CWaCKierMG Waste Working Plan

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.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	The Cheshire West and Chester (CWaC) waste transfer station operated by Kier MG at SJ 40950 76883, is located at the junction of Oil Sites Road and Dock Yard Road, Ellesmere Port, to the east of Junction 9 of the M53 and approximately 1km North East of Ellesmere Port town centre. The site is directly bordered to the North West by a sewage works and North East by a strip of vacant land with the Manchester Ship Canal beyond. To the South West and South East the site bordered by Oil Sites Road and Dock Yard Road respectively. The site is largely rectangular in shape, with levels falling from approximately 10.00m AOD in the south west to approximately 7.00m AOD at the north eastern end. It occupies an area of approximately 38,000m².

	The geo-environmental setting of the site is summarised below: - Published British Geological Survey (BGS) information records superficial deposits comprising glacial till underlain by Triassic strata, specifically the Wilmslow Sandstone - Previous intrusive investigations on site recorded up to 1.6m of made ground overlying firm to stiff and stiff gravelly clays proved to 7m. - The site is unaffected by past shallow coal mining. - Superficial strata are classified as an Unproductive Aquifer with the bedrock classified as a Principal aquifer. - The Manchester Ship Canal and the Shropshire Union Canal, as well as the River Mersey Estuary SSSI, SPA Ramsar, lie within approximately 112m of the site. - Historically, there were four discharge (sewage/surface water) consents for the site, three of which have been revoked and one is historic; Stw Storm Overflow/storm Tank - Water Company Permit Number: 016881718. - The site is not within a floodplain as defined by the EA.No radon protection measures are necessary at the present time. See CWaCKierMG Geo-environmental desktop study and CWaCKierMG Ground Investigation Report (undertaken by Patrick Parsons Ltd) for further information.
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	Pollution Incidents Records obtained from the National Incident Recording System (NIRS) cites only one pollution event relating to the site, details as follows: Incident Date: 14/06/2001 Incident Identification: 9175 Pollutant: Oils and Fuel Pollutant Description: Diesel Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact) Brief Site History A brief summary of the salient points relating to the history of the site from 1851 to 2012, in respect to potential sources of contamination and other geo-environmental issues, are presented below (further information and OS maps can be found in CWaCKierMG Geoenvironmental desktop study): 1851-There were no discernible features on site. 1872-1894 OS maps of the time shows the

	site to consist of fields. A tile works and kilns are shown on site along with a small building and four ponds. The north eastern boundary of the site is shown to be marshland at the edge of the estuary sands. 1897-1899 The tile works is no longer present and the Manchester Ship Canal is now visible forming the north eastern boundary of the site. A dock, a number of landing stages and travelling cranes are now present along this boundary and is labelled as a Ship Repairing Yard. Four buildings are present along the north western boundary of the site. A small development of terraced housing is visible in the south western corner of the site. 1909-1957 Only one pond is shown on site. Another large building has been constructed to the northern end of the site. The north western boundary of the site now consists of a sewage works. 1965-2012 The terraced housing is no longer present on site and the Gas Works is now present on site. The buildings had remained in the configuration, including various tanks and storage depots that were present at the demolition phase, 2013 Development of the site as CWaC's WTS.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	A desk study and ground investigation report was undertaken by Patrick Parsons Ltd (PPL) in 2013 to satisfy relevant planning conditions for the construction of CWaC's waste transfer station. A summary of PPL's intrusive ground investigation is as follows: Made ground soils identified across the site comprise predominantly either ash-based or slag-based materials. The presence of ACMs (unbound and bound) was confirmed within these materials site wide. No other determinands were in excess of the assessment criteria appropriate for the proposed end-use. These soils are considered as not presenting a significant human health risk to future occupants, but may potentially have presented a risk to site workers during redevelopment. The risk presented to environmental receptors was considered as negligible. No significant remediation measures were considered necessary to facilitate development. The provision of almost total hardcover across the site, as existing, will protect end-users, blocking the pathways from sources. The presence of asbestos across the site dictated an enhanced thickness of clean capping in areas of soft landscaping. Provisionally, a 600-1000mm thick capping (including 150mm of topsoil) was recommended. The impact of the made ground and upper natural soils by heavy end hydrocarbon

		contaminants had been confirmed by the laboratory testing adjacent to an above ground diesel tank in the west, beneath the former vehicle maintenance building in the west and adjacent to the interceptor sump in the northwest. Localised remediation of this area, was undertaken during redevelopment; excavation, separation and off-site disposal of impacted soils. In addition, significant hydrocarbon impact of perched groundwater was noted within the in-filled former pond located in the north eastern part of the site. Groundwater and soils in the area of the former pond were removed and disposed of appropriately. The report considers that the above localised and discrete areas of identified impact did not present a significant risk to environmental receptors. The potential for such contaminants to impact upon the Manchester Ship Canal located to the north east is very low in that groundwater is perched and the presence of extensive cohesive drift deposits would significantly retard any lateral movement of potential contaminants. The thickness of these cohesive drift deposits, recorded as up to 20m locally, would preclude any potential downward movement of contaminants into the underlying Principal aquifer. It is possible that potentially contaminated soils are present in areas not covered by the intrusive investigation. An outline remediation strategy and method statement was prepared and issued as a separate report. Further intrusive investigations undertaken by PPL reviewed Hazardous Ground Gas Risk Assessment, details of which are as follows: two ground gas monitoring rounds were undertaken, both sets of results were consistent, with no significant positive gas flows (maximum 0.2l/hr), no methane and minimal concentrations of carbon dioxide (maximum 0.4% v/v) recorded. No significant putrescible made ground sources were encountered on-site with limited organic soils identified in the north eastern part of the site only and extensive natural cohesive soils and high perched groundwater present across the site. Elevated atmospheric pressures were recorded during the monitoring rounds, although this was not considered to be a significant controlling factor, given the conditions, discussed above.
Baseline soil and groundwater reference data		See CWaCKierMG Geo-environmental desktop study and CWaCKierMG Ground Investigation Report
Supporting information	• Source information identifying environmental setting and pollution incidents • Historical Ordnance Survey plans • Site reconnaissance	

	• Historical investigation / assessment / remediation / verification reports • Baseline soil and groundwater reference data
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3.0 Permitted activities	
Permitted activities	The total annual quantities of waste accepted at CWaC's waste transfer station shall not exceed 55,000 tonnes per annum, with treatment consisting only of manual sorting, separation, screening, baling, shredding, crushing or compaction of waste into different components for disposal, (no more than 100 tonnes per day) or recovery (see CWaCKierMG Waste Working Plan for further details). All waste is either stored within secure containers or stored on impermeable surfaced bays with a sealed drainage System.
Non-permitted activities undertaken	S1 (EPR/PF0600MY/A001—expires 16/01/2018) Storage of waste oil, WEEE (SDA) in secure containers S2 (EPR/PF0600MY/A001—expires 16/01/2018) - Waste that is produced off-site and brought back to this depot and stored in secure containers shall be in accordance with exemption S2.
Document references for: • plan showing activity layout; and • environmental risk assessment.	See CWaCKierMG Proposed Site Plan See CWaCKierMG Env Risk Assess

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity		
Have there been any changes to the activity boundary?		A substantial variation application for the site is to extend the permitted area layout, refer to 'Appendix 10 Site Boundary'. The site activities are still within the SCR site area.
Have there been any changes to the permitted activities?		Permit transfer to Cheshire West Recycling Limited EPR/JB3005CJ. The site is increasing the annual tonnage throughput to 120,000 tonnes per annum by incorporating exemptions activities S1 and S2 into the permit and adding waste codes from T11 and T15 following a substantial variation.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?		No, the initial site condition report was for the whole area. CWR are extending site layout areas that have already assessed under the initial site condition report. Refer to variation approved in 2016 under EPR number EPR/CB3408UQ/V003.
Checklist supporting information	of	• Plan showing any changes to the boundary (where relevant) • Description of the changes to the permitted activities (where relevant) • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect land		
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.		
Checklist supporting information	of	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation		
Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.		
Checklist supporting information	of	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)

Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.

Checklist supporting information	of	• Description of soil gas and/or water monitoring undertaken • Monitoring results (including graphs)
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8.0 Decommissioning and removal of pollution risk

Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.

Checklist of supporting information	• Site closure plan • List of potential sources of pollution risk • Investigation and remediation reports (where relevant)
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9.0 Reference data and remediation (where relevant)

Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated.

If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.

Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)
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10.0 Statement of site condition

Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that:

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.