WPS Compliance Consulting Ltd

Best Available Techniques (BAT) Assessment

Client: Clearwater D C 2001 Ltd

Project: 1-4 Enterprise Park, Hunters Road, Weldon North Industrial Estate, Corby, NN17 5JE

Ref: 14147

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Contents

1. Introduction

1.1 Scope

WSPCC Ltd has been instructed by Clearwater D C 2001 Ltd to prepare a permit variation application for their existing permit (Ref EPR FB3708UK) for the change in hazardous waste storage quantity and the addition of the D15 code, storage of waste pending disposal.

This report covers an assessment of Best Available Techniques (BAT) from the most relevant Best Available Technique Reference Document (BREF).

The document is to ensure that Best Available Techniques at this site is the main objective of its operations and clear operating procedures are in place in line with best practice.

The existing operation relating to Clearwater D C 2001 Ltd is unaffected by the variation other than for the change in hazardous waste storage quantity and the addition of the D15 code, storage of waste pending disposal. Therefore, a review of the 'Best Available Techniques Reference Document for Waste Treatment' have only been reviewed in relation to the changes that have been applied for.

1.2. Assessment Approach

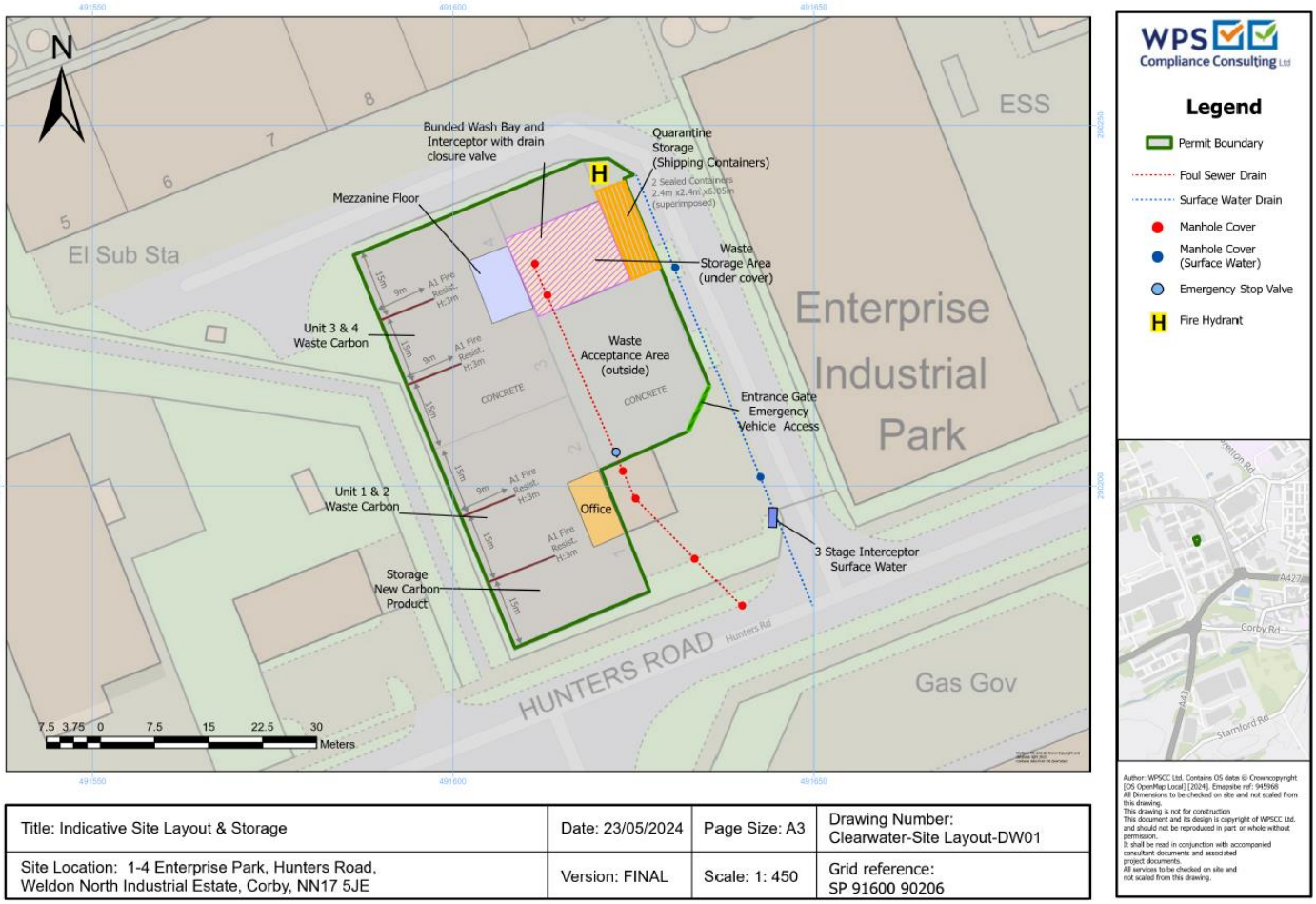
The 'Best Available Techniques (BAT) Reference Document for Waste Treatment' (Environment Agency, 2018) guidance has been reviewed. Please refer to section 2 for the justification against each applicable BAT requirement as set out in the Best Available Techniques Reference (BREF) and BAT conclusions guidance document.

2. Site Overview

2.1 Technical Operations

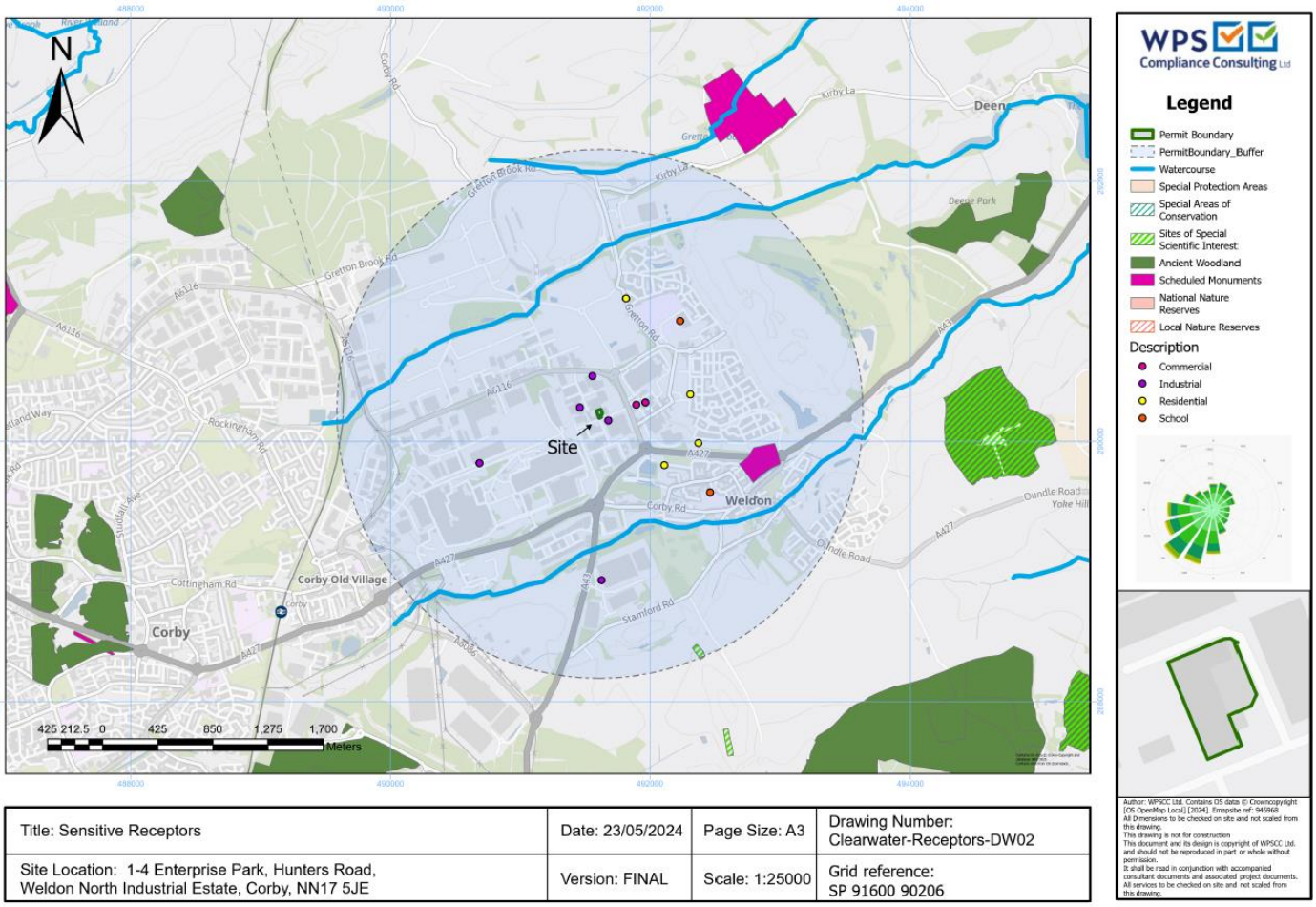
The maps below figure 1 and 2 shows the site layout at Clearwater D C 2001 Ltd.

Figure 1: Site layout



Title: Indicative Site Layout & Storage	Date: 23/05/2024	Page Size: A3	Drawing Number: Clearwater-Site Layout-DW01
Site Location: 1-4 Enterprise Park, Hunters Road, Weldon North Industrial Estate, Corby, NN17 5JE	Version: FINAL	Scale: 1: 450	Grid reference: SP 91600 90206

Figure 2: Sensitive Receptors



Title: Sensitive Receptors	Date: 23/05/2024	Page Size: A3	Drawing Number: Clearwater-Receptors-DW02
Site Location: 1-4 Enterprise Park, Hunters Road, Weldon North Industrial Estate, Corby, NN17 5JE	Version: FINAL	Scale: 1:25000	Grid reference: SP 91600 90206

Clearwater D C 2001 Limited is an existing permitted facility for the reprocessing of activated carbon which has previously been used in filtration systems. The activated carbon has a limited capacity to remove contaminants and after a prescribed usage period the spent activated carbon is exchanged for new or reprocessed material. The Clearwater Corby site is a transfer station for the collection, segregation, sorting and bulking of activated carbon prior to onward shipment to another permitted facility for reprocessing and recovery. Waste can arrive on site in vessels, tankers, or bags.

3.0 BAT Assessment

3.1 BAT Assessment

This BAT assessment has been produced using the BREF document: “Best Available Techniques (BAT) Reference Document for Waste Treatment” and the relevant BAT conclusions which covers installations on several waste (hazardous and non-hazardous) treatments focusing on common waste treatment such as the temporary storage of waste and physico-chemical treatment.

3.1.1 BAT 2: In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below.

BAT requirements	Comments
• Set up and implement waste characterisation and pre-acceptance procedures • Set up and implement waste acceptance procedures • Set up and implement a waste tracking system and inventory • Ensure waste segregation • Ensure waste compatibility prior to mixing or blending of waste	Waste pre-acceptance and acceptance procedures in place and outlined in the sites Environmental Management System (EMS) (Doc Ref: Waste Pre-acceptance and Acceptance procedures). Prior to accepting the waste, enquiries will be made from the waste producer. Confirmation from the waste producer is required before accepting the waste. This will confirm the source and nature of the waste. On arrival each load will be accompanied with written information in accordance with the Duty Of Care requirement or a season ticket where relevant. Waste can only be accepted if the EWC code is part of the permitted condition of the Environmental Permit. Waste will only be accepted on site after assessing the waste's suitability for storage and within the permit conditions. The site has set storage bays to ensure waste is kept separated depending on its properties such as hazardous and non-hazardous bays. The site has an online waste tracking system and sampling procedures in place to assist with the waste pre-acceptance and acceptance procedures (Doc Ref: CW003 Sampling Procedures). The waste tracking system and inventory ensures location and quantity of waste is recorded. It holds all the information generated during waste pre-acceptance procedures (e.g. date of arrival at the plant and unique reference number of the waste, information on the previous waste holder(s), pre-acceptance and acceptance analysis results, nature and quantity of the waste held on site including all identified hazards), acceptance, storage, treatment and/or transfer off site. These procedures aim to ensure the technical (and legal) suitability of waste treatment operations for the waste prior to the arrival of the waste at the installation. This will also ensure waste compatibility prior to the bulking up of the waste.

3.1.2 BAT 4: In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.

BAT requirements	Comments
• Optimised storage location • Adequate storage capacity • Safe storage operation • Separate area for storage and handling of packaged hazardous waste	Storage locations are optimised with storage located as far as technically possible from sensitive receptors. The site has storage and handling of wastes procedures in place (Doc Ref: Storage and Handling of Waste Procedures). Majority of the site's storage is inside units 1-4 which have roller shutter doors. Some waste is stored outside under a waterproof cover. The prevailing wind direction is a South Westerly wind. No sensitive receptors were identified as South Westerly within 1km of the site. All waste storage locations are under cover or inside buildings. The site has an online waste tracking system to assist with the waste pre-acceptance and acceptance procedures. The waste tracking system and inventory ensures location and quantity of waste is recorded to ensure compliance with permit quantities. The online waste tracking system also ensures waste on site is recorded and manage the storage of all waste on site, ensuring 'first in, first out' principles are followed. The site has an inventory of all operating equipment, machinery and vehicles which are services and maintained.

3.1.3 BAT 5: In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.

BAT requirements	Comments
Handling and transfer procedures aim to ensure that wastes are safely handled and transferred to the respective storage or treatment. They include the following elements: • Handling and transfer of waste are carried out by competent staff; • Handling and transfer of waste are duly documented, validated prior to execution and verified after execution; • Measures are taken to prevent, detect and mitigate spills; • Operation and design precautions are taken when mixing or blending wastes (e.g. vacuuming dusty/powdery wastes). • Handling and transfer procedures are risk-based considering the likelihood of accidents and incidents and their environmental impact.	The site has storage and handling of waste procedures in place to ensure wastes are safely handled and transferred to the storage areas on site (Doc Ref: Storage and Handling of Waste Procedures). As per the sites EMS, training for all members of staff includes: • Site Induction • Awareness of the environmental impacts highlighted by the environmental risk assessment and use and maintenance of the controls in place to prevent accidents and pollution. • Awareness of staff / employee roles and responsibilities in achieving conformance of the legal requirements for health and Safety, Environmental Permit and the Environmental Management System, Environmental Policy, targets and objectives. • Roles and responsibilities for emergency procedures in case of fire, flood, leaks and spills. Awareness and use of the Emergency Procedures file and what action they need to take. The site has spillage response procedures (Doc Ref: Spillage Response Procedures) to ensure spills are detected, prevented and mitigated.

3.1.4 BAT 12: In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system that includes all of the following elements

BAT requirements	Comments
• A protocol containing actions and timelines; • A protocol for conducting odour monitoring as set out in BAT 10; • A protocol for response to identified odour incidents, e.g. complaints; • An odour prevention and reduction programme designed to identify the source(s); to characterise the contributions of the sources; and to implement prevention and/or reduction measures. • The applicability is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.	Majority of waste is stored inside buildings - units 1-4. The site includes odour investigation in the daily and weekly checks. Waste material can be stored in airtight packaging if found to be causing issue on site prior to causing issue off site. The site has not received any odour complaints. The prevailing wind direction is a South Westerly wind. No sensitive receptors were identified South West within 2km of the site. Odour nuisance is not expected and identified in the Environmental Risk Assessment as low risk of odour nuisance to nearby sensitive receptors.

3.1.5 BAT 13: In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the techniques given below.

BAT requirements	Comments
• Minimising residence times	Waste handling and storage ensure the storage time of stock is managed. To manage the storage time of stock, the site will ensure that the stocks of stored wastes are rotated to ensure the minimum period of storage on site for any individual load. The site has an online waste tracking system to assist with managing stock residence times. The waste tracking system and inventory ensures location and quantity of waste is recorded and manages the storage of all waste on site, ensuring 'first in, first out' principles are followed.

3.1.6 BAT 14: In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below.

BAT requirements	Comments
• Minimising the number of potential diffuse emission sources • Containment, collection, and treatment of diffuse emissions • Dampening • Maintenance • Cleaning of waste treatment and storage areas	The Environmental Risk Assessment has identified dust as low risk to sensitive receptors. The site has a Dust Emissions Management Plan (DEMP) to ensure appropriate measures are used to prevent emissions of dust (Doc Ref: CW DEMP V1). The DEMP outlines the likely sources of dust on site and mitigation measures to ensure the risk of dust emissions from the site remain low. Mitigation measures include dampening down the site using rain captured water, ensuring vehicles arriving and leaving the site are covered, reduce vehicle idling and secondary containment when decanting waste from one container to another. Regular daily housekeeping such as sweeping or using an industrial hoover ensures the site such as the waste storage areas are clean.

3.1.7 BAT 17: In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:

BAT requirements	Comments
• A protocol containing appropriate actions and timelines; • A protocol for conducting noise and vibration monitoring; • A protocol for response to identified noise and vibration events, e.g. complaints; • A noise and vibration reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures. • The applicability is restricted to cases where a noise or vibration nuisance at sensitive receptors is expected and/or has been substantiated.	Not applicable to site as noise nuisance to sensitive receptors is not expected with the risk identified as low in the Environmental Risk Assessment. The site has never had any noise complaints. Noise has been identified as low risk to sensitive receptors and therefore a Noise Management Plan is not required. The site is located on an industrial estate.

3.1.8 BAT 18 In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to use one or a combination of the techniques given below.

BAT requirements	Comments
• Appropriate location of equipment and buildings • Operational measures • Low-noise equipment • Noise and vibration control equipment • Noise attenuation	The site is located within an Industrial estate. The Environmental Risk Assessment has identified Noise Nuisance as low risk to sensitive receptors. Majority of waste is stored inside units which have shutter doors. Checks are in place to ensure periodic inspection and maintenance of equipment and are operated by trained staff as outlined in the sites EMS (Doc Ref: Clearwater EMS). The site does not operate at night.

3.1.9 BAT 21: In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan

BAT requirements	Comments
• Protection measures • Management of incidental/accidental emissions • Incident/accident registration and assessment system	In the event of an emergency, Clearwater DC 2001 Ltd has a 'Response Plan and Emergency File' which identifies action plans and reporting procedures for spills, explosions, and major accidents. This document is located in the Reception, easily accessible by all staff. All staff are aware of the environmental impacts highlighted by the Environmental Risk Assessment and use and maintenance of the controls in place to prevent accidents and pollution. All emergency response procedures (Fire, Flood, Leaks and Spills, Breakdown of Equipment) are tested at least annually for training purposes. Where appropriate, in accordance with the Environmental Permit, the Environment Agency will be notified within 24 hours of detection of any accident, malfunction, breakdown, or failure of equipment or techniques or fugitive emission which has caused or is causing or may cause significant pollution or a breach of a limit specified by the environmental permit. All accidents/incidents are recorded.

3.1.10 BAT 40: In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures (see BAT 2)

BAT requirements	Comments
• Monitoring the waste input	Waste pre-acceptance and acceptance procedures in place and outlined in the sites Environmental Management System (EMS) (Doc Ref: Waste Pre-acceptance and Acceptance procedures). Prior to accepting the waste, enquiries will be made from the waste producer. Confirmation from the waste producer is required before accepting the waste. This will confirm the source and nature of the waste. On arrival each load will be accompanied with written information in accordance with the Duty Of Care requirement or a season ticket where relevant. Waste can only be accepted if the EWC code is part of the permitted condition of the Environmental Permit. Waste will only be accepted on site after assessing the waste's suitability for storage and within the permit conditions. The site has set storage bays to ensure waste is kept separated depending on its properties such as hazardous and non-hazardous bays. The site has an online waste tracking system and sampling procedures in place to assist with the waste pre-acceptance and acceptance procedures (Doc Ref: CW003 Sampling Procedures). The waste tracking system and inventory ensures location and quantity of waste is recorded. It holds all the information generated during waste pre-acceptance procedures (e.g. date of arrival at the plant and unique reference number of the waste, information on the previous waste holder(s), pre-acceptance and acceptance analysis results, nature and quantity of the waste held on site including all identified hazards), acceptance, storage, treatment and/or transfer off site. These procedures aim to ensure the technical (and legal) suitability of waste treatment operations for the waste prior to the arrival of the waste at the installation. This will also ensure waste compatibility prior to the bulking up of the waste.

4 Conclusion

The BREF document and BAT conclusions from the 'Best Available Techniques (BAT) Reference Document for Waste Treatment.' : BAT documents have been considered for this permit variation application. Comments have been made to demonstrate compliance with the BAT requirements where these are relevant to the installation.

5 References

Environment Agency (2018) *Best Available Techniques (BAT) Reference Document for Waste Treatment.* Available at: https://eippcb.jrc.ec.europa.eu/reference/waste-treatment-0 (Accessed 22/05/2024)

Environment Agency (2018) *Bat Conclusions.* Available at: https://eippcb.jrc.ec.europa.eu/reference/waste-treatment-0 (Accessed 22/05/2024)