

Net Zero Teesside

Deposit for Recovery Permit Application EPR/ZP3827SK/A001
BAT Assessment for Waste Treatment Activities

Net Zero Teesside Power Limited

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Prepared by	Checked by	Verified by	Approved by
Demi Martin Graduate Consultant	Caroline Braithwaite Principal Consultant	Angela Graham Technical Director	Ian Campbell Project Manager

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	1	Net Zero Teesside Power Limited

Prepared for:

Net Zero Teesside Power Limited

Prepared by:

Demi Martin
Graduate Consultant
E: demi.martin@aecom.com

AECOM Limited
12 Regan Way
Chetwynd Business Park
Nottingham NG9 6RZ
United Kingdom

T: +44 (115) 827 8000
aecom.com

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Glossary

Acronym	Definition
BAT	Best Available Technique
BOD	Biological Oxygen Demand
BREF	BAT Reference Document
CCTV	Closed Circuit Television
CCUS	Carbon Capture Use and Storage
CEMP	Construction Environmental Management Plan
CO ₂	Carbon Dioxide
DCO	Development Consent Order
DfR	Deposit for Recovery
EA	Environment Agency
EN	European Norm
EPR	Environmental Permitting Regulations
ERP	Emergency Response Plan
ESSD	Environmental Setting and Site Design
EU	European Union
HV	High Voltage
IAR	Impact Assessment Report
IED	Industrial Emissions Directive
ISO	International Standard Organisation
JRC	Joint Review Committee
LEP	Local Enforcement Position
MWe	Mega Watt electrical
MSS	Management System Summary
N/A	Not Applicable
NHIWAM	Non-Hazardous and Inert Waste Appropriate Measures
NZT	Net Zero Teesside
NZTPL	Net Zero Teesside Power Limited
PCC	Post Combustion Capture
PCDD	Polychlorinated dibenzo-p-dioxins
STDC	South Tees Development Corporation
VOC	Volatile Organic Carbons
WEEE	Waste Electrical and Electronic Equipment
WMP	Water Management Plan
WRP	Waste Recovery Plan

1. Introduction

1.1 Report Context

AECOM Limited (AECOM) has been commissioned by Net Zero Teesside Power Limited ('NZTPL'), referred to as 'the Operator', to prepare the application for an environmental permit for a Deposit for Recovery (DfR) operation during the construction phase of the Net Zero Teesside Project.

This report has been prepared to support the permit application and summarise the assessment of best available techniques (BAT) for the treatment and storage of the site won materials being used in accordance with the requirements of the Waste Recovery Plan. The report should be read in conjunction with other supporting application information.

1.2 Background

Net Zero Teesside (NZT) is a low carbon electricity generating station, which forms part a proposed Carbon Capture, Utilisation and Storage (CCUS) project located in Redcar, Teesside.

Prior to the construction of the facility, the land on which the PCC installation will be developed was subject to remediation by the landowner, South Tees Development Corporation (STDC). This involved the excavation, treatment and redeposit of excavated waste at the site under:

- a. Planning approval R/2021/1048/FFM, with Remediation Verification Report submitted under R/2024/0817/CD; and
- b. A Local Enforcement Position (LEP) issued by the Environment Agency (EA) (reference STDC/NZT/LEP, issued on the 19th June 2023 and extended on the 25th June 2024).

The STDC remediation involved the following works:

- demolition of existing structures within the Teesworks site: principally the former raw materials handling facility, sinter plant and conveyor systems;
- excavation of an agreed thickness of the made ground to remove unsuitable/contaminated/hazardous materials including removal and crushing of derelict underground structures and obstructions within that depth;
- targeted removal of deeper underground structures;
- crushing and grading of suitable material to form a geotechnical material complaint with requirements in the Highways Spec series 600; and
- testing followed by placement and compaction of suitable material to form appropriate platform levels for development.

The LEP permitted the redeposit of up to 1,252,000 m³ of excavated remediated waste to provide for the reclamation or improvement to land as detailed in the submitted Waste Recovery Plan (WRP)¹. The STDC works associated with this LEP and WRP were completed in October 2024, creating the development platform on which the PCC Facility will be built. As a result, the waste material being considered for recovery under this application has already been lifted, processed and redeposited as part of the remediation works.

Following completion and validation/verification of the remediation works, NZTPL will lease the site, and the construction of the facility is anticipated to commence with a construction schedule lasting approximately 4 years.

The construction of the facility is expected to involve a number of works which will generate excavated material comprising both previously remediated and redeposited materials. There are opportunities to recover previously remediated excavated materials to deliver aspects of the construction scheme which in turn will reduce the volume of excavated material sent for off-site disposal and reduce the need for the import of virgin material. It is understood that such material reuse must be completed under a Deposit for Recovery (DfR) permit.

The Operator intends to reuse excavated material from construction earthworks to refill, level and raise the Site and reduce the volume of excavated material being taken off site for disposal. There is also the potential to reuse

¹ Atkins, Land West of Warrenby Waste Recovery Plan, ref: LWWX-ATK-EEI-NZTXX-RP-EN-000001, 16 May 2023

excavated material from pipeline and cable construction within the installation boundary to refill pipeline and cable excavations.

1.3 Waste Treatment Activities

As part of the DfR activities, NZTPL have identified the potential need to screen and/or crush excavated material prior to replacement. This will be undertaken by combination of:

- Mobile plant such as excavators and shovels where additional processing is unlikely to be required; or
- By passing the material through a screening and/or crushing plant which would be mobilised to site during only the construction phase activities. Following completion of construction these items of plant would be demobilised and removed from site.

This BAT assessment only evaluates these waste treatment activities.

2. Definition of Best Available Techniques

The Industrial Emissions Directive (2010/75/EU) defines BAT as “the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and where that is not practicable, generally reduce emission and the impact on the environment as a whole”.

The Directive continues to provide further definition as follows:

- “available techniques” are those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator.
- “best techniques” are the most effective in achieving a high general level of protection of the environment as a whole.
- “techniques” are both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

BAT may be demonstrated by either:

- Compliance with the sector-level, indicative BAT performance described guidance such as Sector Guidance Notes provided by the Environment Agency or in the European Commission ‘Reference Documents on BAT’ (BREFs) or BAT conclusions; or
- By conducting an installation-specific, options appraisal of candidate techniques.

The indicative BAT provided in the European BREF/BAT Conclusion documents is based on an analysis of the costs and typical benefits for typical, or representative, plants within that sector. When assessing the applicability of the sectoral, indicative BAT standards at the installation level, departures may be justified on the grounds of the technical characteristics of the installation concerned, its geographical location and the local environment.

3. BAT Assessment for Treatment of Excavated Material Prior to Reuse

An assessment of the proposed waste treatment activities associated with the recovery operations has been completed against the:

- Best Available Techniques (BAT) Conclusions for Waste Treatment under Directive 2010/75/EU of the European Parliament and of the Council” (Decision 2018/1147); and
- Environment Agency Guidance “Non-hazardous and Inert Waste Appropriate Measures (NHIWAM) for Permitted Facilities (July 2021, Updated August 2023).

The summary assessment against the relevant BAT requirements is presented in Appendix A.

Appendix A BAT Assessment

Table 1. BAT Assessment

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
BAT 1 NHIWAM 2.1, 2.2 and 2.5	<p>In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:</p> <p>I. commitment of the management, including senior management;</p> <p>II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;</p> <p>III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;</p> <p>IV. implementation of procedures paying particular attention to:</p> <p>(a) structure and responsibility,</p> <p>(b) recruitment, training, awareness and competence,</p> <p>(c) communication,</p> <p>(d) employee involvement,</p> <p>(e) documentation,</p> <p>(f) effective process control,</p> <p>(g) maintenance programmes,</p> <p>(h) emergency preparedness and response,</p> <p>(i) safeguarding compliance with environmental legislation;</p> <p>V. checking performance and taking corrective action, paying particular attention to:</p> <p>(a) monitoring and measurement (see also the JRC Reference Report on Monitoring of emissions to air and water from IED installations – ROM),</p> <p>(b) corrective and preventive action,</p> <p>(c) maintenance of records,</p> <p>(d) independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;</p> <p>VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;</p> <p>VII. following the development of cleaner technologies;</p> <p>VIII. consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;</p>	<p>A Management System Summary (MSS) has been provided in Part 3 of the Application Pack which sets out how the DfR operation will be managed in accordance with these principles and the Environment Agency “Develop a Management System: Environmental Permits” guidance (February 2016, updated April 2023).</p> <p>The MSS will be supported by a Construction Environmental Management Plan (CEMP)² with associated operational procedures.</p> <p>The CEMP will detail the roles and responsibilities of personnel undertaking the construction works and the site will be operated by competent personnel trained to defined standards.</p> <p>The MSS structure incorporates a plan, do, check and act cycle which meets the requirements of Section 2 of EA Guidance and BAT 1 criteria including accident management.</p>	Management System Summary (ZP3827SK-MSS-R02)

² Balfour Beatty, NZT/NEP Construction Environmental Management Plan, ref:MCC21001-257-A00-XX-PRM-EV-00009, December 2024

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
	IX. application of sectoral benchmarking on a regular basis; X. waste stream management (see BAT 2); XI. an inventory of wastewater and waste gas streams (see BAT 3); XII. residues management plan (see description in Section 6.6.5); XIII. accident management plan (see description in Section 6.6.5); XIV. odour management plan (see BAT 12); XV. noise and vibration management plan (see BAT 17).		
BAT 2 NHIWAM 31, 3.2, 3.3 & 3.4	In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below: a. Waste characterisation and pre-acceptance procedures; b. Waste acceptance procedures; c. Waste tracking system and inventory; d. Output quality management system; e. Waste segregation; f. Ensuring waste compatibility; g. Sort solid incoming waste.	<p>The majority of waste will be site-won excavated materials with the potential for a small amount of imported material in the event a deficit is encountered.</p> <p>All waste materials accepted for reuse will be non-hazardous as defined against WM3 and will be to subject checks and validation in accordance with the Waste Acceptance Procedures (Appendix E, F and G of the Waste Recovery Plan).</p> <p>The waste will be sampled and tested in accordance with the defined sampling and testing criteria and will only be accepted if it is of a type listed in the Waste Recover Plan and meets any additional restrictions specified; and</p> <ol style="list-style-type: none"> It has been confirmed as non-hazardous in accordance with WM3; it has been identified as a suitable waste in the approved waste recovery plan; and its chemical, physical and biological characteristics make it suitable for its intended use on the site. <p>Any material found not to be suitable for use will be removed from site via an appropriate licensed waste management route.</p> <p>Records will be retained of</p> <ul style="list-style-type: none"> all waste accepted; all sampling and testing undertaken; any waste treatment undertaken; and any material that was rejected. 	Waste Recovery Plan, Appendix E – G. (ZP3827SK-WRP-R04)
BAT 3 NHIWAM 2.1	In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of wastewater and waste gas streams, as part of the environmental management system	N/A – no point source releases of wastewater or waste gas will be produced.	

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
BAT 4 NHIWAM 4	In order to reduce the environmental risk associated with the storage of waste. a. Optimized storage location b. Adequate storage capacity c. Safe storage operation d. Separate area for handling packaged hazardous waste.	Waste will be stored for a maximum of 3 years. Waste stockpiles will be managed as defined in the Management System Summary and consideration will be given to: <ul style="list-style-type: none"> stockpile locations as close to the point of use as practicable to minimise handling, locations away from water sources and drainage system; and controls to deal with minimisation and management of fugitive releases. 	Management System Summary (ZP3827SK-MSS-R02) Waste Recovery Plan (ZP3827SK-WRP-R04) Impact Assessment Report (ZP3827SK-IAR-R02)
BAT 5 NHIWAM 4	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.	The volume of waste being used will be a direct replacement of non-waste materials only – any surplus material generated on site will be removed via an appropriate waste management route. The Site will be operated in accordance with the CEMP, associated Site Waste Management Plan ³ and defined operating and maintenance procedures including those aimed at amenity management. An overview of the procedures is provided in the MSS which demonstrate the relevant BAT 5 criteria have been considered and incorporated as appropriate. <ul style="list-style-type: none"> Handling and transfer of waste are carried out by competent staff who are provided with appropriate site specific training: <ul style="list-style-type: none"> i. Induction: mandatory training for both staff and contractors on site ii. Role Specific Training: Determined by a Role Specific Training Matrix, all staff will be categorised by the job role and plans created accordingly. iii. Task Specific Training: covering routine tasks and documented via Standard Operating Procedures (SOP). Handling, transfer and placement of waste will be duly documented The Waste Acceptance Procedure details what waste is acceptable on site and employees are trained in handling this type of waste. 	Management System Summary (ZP3827SK-MSS-R02) Waste Recovery Plan (ZP3827SK-WRP-R04)

³ Balfour Beatty, "Construction Environmental Management Plan – Appendix C5 Site Waste Management Plan", ref: MCC21001-257-A00-XX-PRM-EV-00002, December 2024

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
		<ul style="list-style-type: none"> Measures will be taken to prevent, detect and mitigate spills <ul style="list-style-type: none"> a) Planned Preventative maintenance ensures that equipment is safe to use and performs as designed. b) A procedure for dealing with spillages of fuels and maintenance materials will be maintained.. There will also be spill kits at crucial points on site which will be noted on the Emergency Response Plan. Minimise accidents and incidents and their environmental impact <p>All handling and transfer procedures are risk based, and the site is designed to minimise the potential for accidents and incidents as well as the potential for impact should any occur</p>	
BAT 6 NHIWAM 6.4	For relevant emissions to water as identified by the inventory of waste water streams (see BAT 3), BAT is to monitor key process parameters (e.g. waste water flow, pH, temperature, conductivity, BOD) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	N/A – there will be no point source releases of wastewater streams.	
BAT 7 NHIWAM 7.3	BAT is to monitor emissions to water with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	During the deposit for recovery operations water quality monitoring will be implemented in accordance with the Groundwater Monitoring Plan to ensure that mitigation measures are operating as planned and preventing pollution.	Groundwater Monitoring Plan (ZP3827SK-GWMP-R02) Environmental Sitting and Site Design (ESSD) Report (ZP3827SK-ESSD-R02)
BAT 8 NHIWAM 7.1	BAT is to monitor channelled emissions to air with at least the frequency given, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	N/A – there are no point source emissions to air.	-
BAT 9 NHIWAM &.1	BAT is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents,	N/A - not undertaking regeneration of spent solvents	-

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
	and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below.		
BAT 10 NHIWAM 2.1 and 6.3	BAT is to periodically monitor odour emissions	N/A - There will be no construction activity that has the potential to release any significant malodorous substances. Therefore, no specific mitigation measures are proposed at this time.	
BAT 11 NHIWAM 8.1, 8.2, 8.3 & 9	BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and wastewater, with a frequency of at least once per year.	Monitoring and reporting of annual water, energy and raw materials consumption will be undertaken. Records will be retained of all wastes reused onsite and any residual materials that are exported for offsite treatment and disposal.	
BAT 12 NHIWAM 2.1 & 6.2	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	N/A - There will be no construction activity that has the potential to release any significant malodorous substances. Therefore, no specific mitigation measures are proposed at this time.	
BAT 13 NHIWAM 2.1 & 6.2	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.	N/A - There will be no construction activity that has the potential to release any significant malodorous substances. Therefore, no specific mitigation measures are proposed at this time.	
BAT 14 NHIWAM 2.1 & 6.2	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.	There will be no construction activity that has the potential to release any significant malodorous substances. Therefore, no specific mitigation measures for odour are proposed at this time. The techniques that will be used are considered are detailed in the CEMP and associated Pollution Incident Prevention Plan ⁴ to meet BAT and comprise the following: <ul style="list-style-type: none"> a) Minimising the number of potential diffuse emissions b) High usage haul routes will be appropriately surfaced and maintained so as to control dust emissions, as far as reasonably practicable. c) Enforce speed limits of 5 mph on haul roads for safety reasons and for the purposes of suppressing dust emissions will be implemented. d) Vehicles transporting the friable waste materials into and from the site will be enclosed or sheeted to reduce emissions; e) Restrict where practicable the use of unmade road accesses; 	Impact Assessment Report (ZP3827SK-IAR-R02)

⁴ Balfour Beatty, "Construction Environmental Management Plan – Appendix C6 Pollution Prevention Plan", ref: MCC21001-257-A00-XX-PRM-EV-00003, December 2024

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
		<p>f) Undertake regular inspection of haul routes and prompt repair (if required) will be undertaken</p> <p>g) The site will operate with high standards of housekeeping, and the plant will be maintained to high standards to minimise fugitive emissions;</p> <p>h) Waste will be stored in a designated stockpile locations.</p> <p>i) Drop heights will be minimised for all material transfer points, when forming stockpiles, when screening or crushing or loading vehicles for despatch;</p> <p>j) Water suppression to minimise dust emissions in dry weather will be available, including the use of mobile dust suppression such as site bowser or mobile dust suppression unites/cannons.</p> <p>k) The frequency of cleaning will be suitable for the purposes of suppressing dust emissions.</p> <ul style="list-style-type: none"> • Selection of high integrity equipment <p>The most appropriate plant and best materials chosen for the associated processes, containers, etc.</p> <ul style="list-style-type: none"> • Corrosion prevention <p>At development, each section of the plant is discussed, and the most appropriate plant and materials chosen for the associated processes, containers, etc to avoid corrosion. All plant and equipment are subject to a planned preventative maintenance regime. .</p> <ul style="list-style-type: none"> • Containment, collection and treatment of diffuse emissions <p>a. Waste and incoming materials will be stored in designated stockpiles..</p> <p>b. Crushing of oversize material will be undertaken using mobile enclosed mechanical crushing plant equipped with integral suppression system on a campaign basis, or such oversize material will be removed from the facility.</p> <p>c. Screening activities will be equipped with integral dust suppression system and in the event of extremely dry conditions occur additional suppression can be supplied through use of mobile dust suppression such as site bowser or mobile dust suppressions units/cannons.</p>	

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
		<ul style="list-style-type: none"> Dampening Use of water misting on the screening and crushing plant when required and water suppression will be available for use on stockpiles and storage areas when required. Maintenance The maintenance scheduling will refer to any statutory requirements and manufacturer's recommendations regarding odour control and maintenance of plant. All processing equipment will be subject to routine inspection and a planned preventative maintenance programme. Cleaning of waste treatment and storage areas Operational areas and wheeled loaders within the facility, external roads and drainage channels will be regularly cleaned. The frequency and procedure for the cleaning activity will be implemented in accordance with the Site Inspection and Housekeeping Procedure. 	
BAT 15	BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns) by using both of the techniques given below.	N/A – no flaring will be undertaken	-
BAT 16	In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use both of the techniques given below.	N/A – no flaring will be undertaken	-
BAT 17 NHIWAM 2.1 & 6.3	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	Monitoring and control of noise and vibration during the construction will be managed in accordance with the approved CEMP and associated Noise and Vibration Management Plan ⁵ .	Impact Assessment Report (ZP3827SK-IAR-R02)
BAT 18 NHIWAM 2.1 & 6.3	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.	<p>Main controls for controlling noise are outlined in the Impact Assessment Report and will be defined in the CEMP include:</p> <ul style="list-style-type: none"> Abiding by agreed construction noise limits at nearby NSRs and where reasonably practicable, construction will be sited at least 20m away from NSRs, 	Impact Assessment Report (ZP3827SK-IAR-R02)

⁵ Balfour Beatty, "Construction Environmental Management Plan – Appendix C3 Noise and Vibration Management Plan", ref: MCC21001-257-A00-XX-PRM-EV-00008, December 2024

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
		<ul style="list-style-type: none"> Avoidance of working in the more sensitive evening and night times where possible. Ensuring processes are in place to minimise noise before works begin and ensuring that best practicable measures (BPM) are being achieved throughout the construction programme. Ensuring that modern plant is used, complying with the latest noise emission requirements. Selection of inherently quiet plant where possible. Hydraulic techniques for breaking to be used in preference to percussive techniques where practical. Use of rotary bored rather the driven piling techniques (if required), where possible. All plant and equipment being used for the works to be properly maintained, silenced where appropriate, operated to prevent excessive noise and switched off when not in use. Use of screening locally around significant noise producing plant and activities. All vehicles used on-Site shall incorporate broadband reversing warning devices as opposed to the typical tonal reversing alarms to minimise noise disturbance where reasonably practicable. 	
BAT 19 NHIWAM 8.1, 8.2, 8.3 & 9	<p>In order to optimise water consumption, to reduce the volume of wastewater generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below:</p> <ol style="list-style-type: none"> 1. Water management 2. Water recirculation 3. Impermeable surface 4. Reduce likelihood/impact of tank/vessel overflow 5. Roofing of waste storage areas 6. Segregation of water streams 7. Adequate drainage infrastructure 8. Detection and repair of leaks 9. Appropriate buffer storage. 	Water use on the site will be primarily for welfare uses and waste treatment processes do not involve treatment with water.	Management System Summary (ZP3827SK-MSS-R02)
BAT 20 NHIWAM 6.4	In order to reduce emissions to water, BAT is to treat wastewater using an appropriate combination of techniques.	N/A - no point source releases of wastewater is expected to be produced and no treatment proposed.	

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
BAT 21 NHIWAM 2.3, 2.4 & 2.5	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 (see BAT 1). a. Protection measures b. Management of incidental/accidental emissions Incident/accident registration and assessment system	Details of the site accident management arrangements are provided in the MSS and supported by procedures defined in the CEMP. These arrangements will include appropriate: <ul style="list-style-type: none"> Protection measures - The site will be provided with suitable site security which reduces risk for malevolent acts to the plant. This includes site security fencing. Management of incidental/accidental emissions – procedures will be defined in the CEMP and site will be provided with spill control equipment.. Incident/accident registration and assessment system. – All accidents and near misses will be logged on. Staff will be trained in site emergency response procedures (ERP) which are tested through drills to evaluate the effectiveness. Abnormal operations including those which can give rise to accidental releases and emergency situations have been assessed within the Impact Assessment Report. 	Management System Summary (ZP3827SK-MSS-R02) Impact Assessment Report (ZP3827SK-IAR-R02)
BAT 22 NHIWAM 9	In order to use materials efficiently, BAT is to substitute materials with waste.	The Operator intends to reuse excavated material from construction earthworks to refill, level and raise the Site and reduce the volume of excavated material being taken off site for disposal. There is also the potential to reuse excavated material from pipeline and cable construction within the installation boundary to refill pipeline and cable excavations.	Waste Recovery Plan (WRP). (ZP3827SK-WRP-R04)
BAT 23 NHIWAM 8.1	In order to use energy efficiently, BAT is to use both of the techniques given below. c. Energy efficiency plan d. Energy balance record	This is not an operational facility so opportunities for energy efficiency will be limited. The CEMP will define the requirements for energy management and the contractor will record energy related performance indicators such as electricity used, and diesel fuel used on mobile plant.	Management System Summary (ZP3827SK-MSS-R02)
BAT 24	Reuse of Packaging	N/A - Minimal packaging is likely to be received on site.	-
BAT 25 NHIWAM 6.2	In order to reduce emissions to air of dust, and of particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT from mechanical treatment is to apply BAT 14d and to use one or a combination of the techniques given.	N/A - not accepting metal waste	-
BAT 26 - 28	These criteria deal with mechanical treatment in shredders of metal waste.	N/A - not accepting metal waste	-
BAT 29 - 30	These criteria deal with mechanical treatment of WEEE containing VFCs and/or VHCs	N/A - not accepting WEEE	-
BAT 31	These criteria deal with mechanical treatment of waste with a calorific value	N/A – not undergoing mechanical treatment of waste with a calorific value	-

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
BAT 32	These criteria deal with the mechanical treatment of WEEE containing mercury	N/A - not accepting WEEE	-
BAT 33 - 39	These criteria deal with biological treatment of waste.	N/A - not undertaking biological treatment	-
BAT 40 - 41 NHIWAM 5	These criteria deal with physico-chemical treatment of waste.	N/A – not undertaking physico-chemical treatment	-
BAT 42 - 44	Criteria for re-finishing of waste oil	N/A - not undertaking waste oil re-finishing	-
BAT 45	Criteria for physico-chemical treatment of waste with calorific value	N/A – not undertaking physico-chemical treatment of waste with calorific value	-
BAT 46 - 47	Criteria for the regeneration of spent solvents	N/A - not undertaking regeneration of spent solvents	-
BAT 48 - 49	Criteria for the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil	N/A - not undertaking thermal treatment as defined by BAT (e.g. using furnace) of any waste types	-
BAT 50 NHIWAM 6.2	<ul style="list-style-type: none"> Criteria for the water washing of excavated contaminated soil 	N/A – no water washing taking place	-
BAT 51	Criteria for decontamination of equipment containing PCBs	N/A - not undertaking decontamination of equipment	-
BAT 52 - 53	Criteria for treatment of water-based liquid waste	N/A- waste treatment is limited to the screening and crushing of site won material	-
Section 6.1 NHIWAM 6.1	Techniques for Controlling Channelled emissions to air	N/A – no channelled emissions to air	Construction Environmental Management Plan
Section 6.2 NHIWAM 6.2	Techniques for diffuse emissions of organic compounds to air	N/A – not accepting waste which will generate VOCs	-
Section 6.3 NHIWAM 6.4	Techniques for controlling emissions to water	<p>A temporary drainage system will be developed to prevent runoff contaminated with fine particulates from entering surface water drains without treatment. This will include identifying all land drains and water bodies on the Site and ensuring that they are adequately protected.</p> <p>Discharge to such water bodies (directly or indirectly) will only be made with the permission of the Environment Agency and with the necessary treatment measures implemented.</p>	-

BAT/Guidance Reference	BAT Description	Operator Response	Application Reference
		<p>Refuelling and delivery areas would be located away from surface water drains and all washing down of vehicles and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses.</p> <p>Foul water from any site compound (including temporary toilets) would be either tankered away to an appropriate disposal facility by a licensed waste disposal contractor, or treated on-site in a package treatment tank or equivalent.</p>	
Section 6.4	Sorting Techniques	N/A no sorting taking place, screening only	-
Section 6.5 NHIWAM 2.3., 2.4 & 9	<p>Management Techniques</p> <ul style="list-style-type: none"> Accident management plan Residues Management Plan 	<p>Details of the site accident management arrangements are provided in the Management System Summary. These arrangements include appropriate:</p> <ul style="list-style-type: none"> Protection measures such a site security, CCTV, segregation of waste, fire prevention and access to appropriate equipment in the event of an incident; Details of the site emergency procedures including contingency arrangements which ensure site storage capacities are not exceeded; and Details of the procedures to investigate and record such incidents, accidents and non-conformances. <p>Staff will be trained in site emergency procedures which are tested through drills to evaluate the effectiveness.</p> <p>Abnormal operations associated with the including those which can give rise to accidental releases and emergency situations have been assessed within the Impact Assessment Report.</p> <p>The arrangements for managing residual materials and waste generated during construction will be defined in the CEMP.</p>	<p>Management System Summary. (ZP3827SK-MSS-R02)</p> <p>Impact Assessment Report (ZP3827SK-IAR-R02)</p>

