Medworth Energy from Waste
Combined Heat and Power Facility

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Draft Outline Construction Environmental Management Plan

June 2021

We inspire with energy.

Report for

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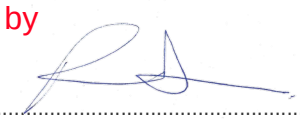

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1. Introduction

1.1 Background

1.1.1 Medworth CHP Ltd (the 'Applicant') intends to make an application to the Secretary of State for a Development Consent Order (DCO) for an Energy from Waste (EfW) combined heat and power (CHP) facility (the 'Proposed Development') on the industrial estate, Algores Way, Wisbech, Cambridgeshire.

1.1.2 The Proposed Development is a Nationally Significant Infrastructure Project (NSIP) under Part 3 Section 14 of the Planning Act 2008 (hereafter referred to as the '2008 Act') by virtue of the fact that the generating station is located in England and has a generating capacity of over 50 megawatts (see section 15(2) of the 2008 Act. It, therefore, requires an application to be submitted for a DCO.

1.1.3 The Applicant proposes to prepare an Outline Construction Environmental Management Plan (CEMP). The document would form part of the suite of documents which would be submitted with the DCO application. A DCO requirement would be included to require the submission of a detailed CEMP following the principles of this outline document. The detailed CEMP would be submitted to the relevant planning authorities for approval prior to the commencement of development and it would be a statutory requirement that all construction activities be carried out in accordance with the approved CEMP.

1.2 Purpose of this Document

1.2.1 This is a draft, Outline CEMP which establishes the responsibilities and environmental standards that the Applicant would contractually require the Principal Contractor(s) (and any sub-contractors) to adopt for the construction of the Proposed Development. This document recognises that there are aspects of the Proposed Development still to be finalised, that environmental surveys and assessments are still underway and that statutory consultation is still to be held. It may also be decided that it is more appropriate to develop two separate CEMPs, one for the EfW CHP Site, CHP Connection and Access Improvements and a separate one for the Grid Connection. It is therefore a draft document which would be confirmed and expanded upon prior to its submission with the DCO application.

1.2.2 Ultimately the CEMP would act as a working document that would be referenced by construction staff on a day-to-day basis and would provide a documented procedure for controlling and mitigating environmental impacts and for minimising disruption to local residents during the construction phase of the Proposed Development.

1.2.3 The CEMP would be made available on-site to all site personnel and representatives of the relevant enforcement authorities, and all contractors working on the Proposed Development would be required to adhere to it at all times.

1.3 Description of Development

1.3.1 The Proposed Development is an Energy from Waste Combined Heat and Power Facility with a combined thermal capacity of 200 Megawatts (MW) thermal in two separate boiler lines. Depending on its calorific value (CV), the actual throughput of waste would vary.

1.3.2 The EfW CHP Facility would be designed to handle 523,500 (nominal) tonnes of non-recyclable (residual), non-hazardous Municipal and Commercial and Industrial waste each year at 10.9MJ/kg (approximately 625,600 per annum at 9.8MJ/kg). It is intended that the EfW CHP Facility would have a generating capacity of more than 50MW and aims to generate up to 53MW_e of electricity (net) and up to 50MW_{th} of usable heat (steam) energy.

1.3.3 The key elements of the Proposed Development are:

- An EfW CHP Facility;
- CHP Connection;
- Access improvements and utility upgrades; and
- Grid Connection.

1.3.4 To facilitate the construction of the Proposed Development there would be a requirement for the creation of Temporary Construction Compounds (TCCs).

1.3.5 The location of the TCCs for the DCO would be confirmed once Grid Connection Option 1 (Walpole Substation) or Option 2 (Walsoken Substation) is selected. Currently 4 TCCs are under consideration. All project components are identified in **Chapter 3: Description of the Proposed Development, Figure 3.2: Project Components.**

1.3.6 Further details of the TCCs under consideration are presented in **Section 3.3** of **Chapter 3: Description of the Proposed Development.**

1.3.7 The need for the TCCs can be summarised as:

- TCC1 – required for the construction of the EfW CHP Facility, Access Improvements, CHP Connection and the Walsoken Grid Connection: and
- TCC1,TCC4 and either TCC2 or TCC3 – required for the construction of the EfW CHP Facility, Access Improvements, CHP Connection and the Walpole Grid Connection.

2. Environmental Responsibilities

2.1 Overall Responsibility

The responsibility for implementation of the CEMP lies ultimately with the Applicant but it would be delivered by the Principal Contractor. The implementation of the CEMP shall be monitored by the Applicant's Senior Project Manager who shall work in conjunction with the Principal Contractor to ensure compliance. To ensure that the plan remains relevant it would be the responsibility of the Principal Contractor's Senior Site Manager to take ownership of the CEMP and ensure its relevance to activities being undertaken on site in light of any changes from the initial scope of the plan. This may require the approved CEMP to be updated as necessary by the Principal Contractor with the prior approval of the relevant host authority and in accordance with the provisions of the DCO.

2.2 Environmental Management System

2.2.1 MVV operates, or is in the process of acquiring certification for, its environmental management systems certified to ISO 14001:2004 across its existing UK facilities. Environmental policy targets are also applied to reduce its environmental impact. The selected Principal Contractor would be expected to demonstrate the same level of commitment to ISO 1400: 2004 principles and implement procedures and systems that are of an equivalent standard, regardless of whether or not they are certified to the standard.

2.2.2 The Applicant is committed to ensuring excellence in environmental performance for all employees, contractors and other stakeholders, and recognises that its activities have an environmental impact. Accordingly, it requires its contractors to actively promote and administer a robust environmental culture amongst their staff, subcontractors and suppliers engaged on the contract.

2.3 Roles and Responsibilities

2.3.1 This CEMP identifies the Project Management Structure, Roles and Responsibilities concerned with the managing and reporting of the environmental impact of the construction phase of the Proposed Development.

2.3.2 The overall environmental objectives that would be applied to the Proposed Development are:

- All practicable steps shall be taken to minimise the environmental effects of construction works;
- All activities shall be conducted in accordance with the CEMP, relevant legislation (including the DCO), Codes of Practices, Guidelines, and any local environmental procedures;
- Environmental licences, permits and consents and other statutory requirements are to be obtained prior to works commencing, and fully complied with;

- All staff (including sub-contractors) shall be aware of the environmental issues relevant to the Proposed Development through the provision of site specific information on the environmental impacts of construction and the mitigation measures to be applied during inductions, briefings and tool box talks; and
- Regularly reviewing of the environmental requirements of the Proposed Development and ensuring that environmental controls remain adequate throughout the duration of construction.

2.4 Senior Project Manager

Key responsibilities are:

- To lead by example and champion all areas of environmental management.
- Ensure that the Principal Contractor has the appropriate resources in place to effectively implement the CEMP and deliver all legal requirements.
- Report and agree in writing any amendments to the CEMP with the relevant planning authorities (Fenland District, Borough Council of Kings Lynn and West Norfolk, Cambridgeshire and Norfolk County Councils) in accordance with the provisions in the DCO and in consultation with any other relevant regulatory bodies, including Anglian Water, the EA and IDBs, Highways England, and DNOs.

2.5 Construction Supervision

2.5.1 The Principal Contractor would be required to employ an environmental representative and identify an emergency response team (where required) to ensure effective environmental project management, commensurate with the scale of the Proposed Development. The Principal Contractor's Senior Site Manager would be responsible for onsite environmental compliance.

2.5.2 This sub-section may be revised or supplemented in the final version of the CEMP that is submitted for approval post DCO grant once the relevant contractors have been appointed. Indicative responsibilities are:

- Ensure that the CEMP and associated documents and control methods are effectively implemented on site on a day to day basis;
- Fully investigate and act on any environmental incidents and report findings to the Senior Site Manager;
- Conduct and document weekly environmental inspections;
- Ensure that environmentally orientated briefings and "Toolbox Talks" are being delivered to the site workforce;
- Implement and maintain environmental controls on site;
- Ensure action is taken on any spills/incidents that occur on site; and
- Report any activity that has potential to have an environmental effect immediately to the Senior Site Manager.

2.6 Contractor roles and responsibilities

2.6.1 This sub-section may be revised or supplemented in the final version of the CEMP that is submitted for approval post DCO grant once the relevant contractors have been appointed. Indicative responsibilities are:

Senior Site Manager

- To lead by example and champion all areas of environmental management;
- Ensure that appropriate resources are in place to effectively implement the CEMP and deliver all legal requirements;
- Review the CEMP throughout the construction process to ensure it remains relevant and effective in identifying and managing environmental risks;
- Ensure that all legal requirements are identified and met;
- Implement the use of an accurate Site Waste Management Plan (SWMP) and ensure its applicability to the site operations;
- Ensure that the site is safe and that hazards are identified and secured;
- Undertake (or nominate others) to undertake audits;
- Monitor performance of the Proposed Development against statutory requirements, objectives and targets;
- Ensure the accurate reporting of resource usage e.g. energy and water;
- Ensure that all documentation referencing environmental procedures and policy are relevant and up-to-date and are consistent with the CEMP;
- Manage all necessary documentation to demonstrate compliance with appropriate legislation for the required period;
- Identify necessary levels of environmental competence in staff and ensure necessary training is delivered to personnel
- Management, investigation and resolution of complaints; and
- Ensure correct procedures are followed in case of an environmental incident.

Construction Supervisor(s)

- Ensure that the CEMP and associated documents and control methods are effectively implemented on site on a day to day basis;
- Fully investigate and act on any environmental incidents and report findings to the Senior Site Manager;
- Conduct and document weekly environmental inspections;
- Ensure that environmentally orientated briefings and “Toolbox Talks” are being delivered to the site workforce;
- Implement and maintain environmental controls on site;

- Ensure action is taken on any spills/incidents that occur on site; and
- Report any activity that has potential to have an environmental effect immediately to the Senior Site Manager.

Site Staff & Subcontractors

- Compliance with direction given by the Principal Contractor in the site induction;
- Proactively approach environmental issues whilst on site;
- Site staff should ensure they are fully aware of the environmental procedures in place and if they have any questions they should be directed towards the Principal Contractor's Senior Site Manager;
- Ensure all construction activities are carried out in line with the procedures detailed in the CEMP; and
- Report any environmental incident to the Principal Contractor's Senior Site Manager.

2.7 Contact Details

2.7.1 The final version of the CEMP would include contact details for key site personnel so that contact can be made with the construction site.

2.8 Environmental Management, Risk Management and Auditing.

Environmental Management

2.8.1 The Environmental Management Systems (EMS) in place conform to BS EN ISO14001. Details of the management system are clearly defined within the management system processes, which should be followed from tender and prequalification stages, through to operational handover. The processes are available to all personnel.

2.8.2 The EMS would be regularly monitored and audited by appropriate personnel, throughout the duration of the works. It is the responsibility of the Applicant to ensure development, approval and effective implementation of the Environmental Management System. This should be undertaken with the support of, environmental advisors, specialists and other suitably qualified personnel. It must also be made clear to all site personnel that each individual has a responsibility to ensure no environmental incidents occur.

Overall Project Management Actions

2.8.3 All environmental documentation shall be kept on site at all times and be available for inspection by internal and external auditors and regulators. Site personnel shall be made aware immediately if any significant changes in work procedures are implemented. Those identified in italics would be prepared in draft and submitted with the DCO application.

2.8.4 Relevant documentation shall include the following:

- Site Weekly Checklist;
- Impacts and Aspects Matrix;
- Environmental Risk Assessment;
- *Construction Environmental Management Plan, which might include;*
  - *Construction Noise Management Plan;*
  - *Dust Management Plan;*
  - *Invasive Species Management Plan;*
  - *Drainage Management Plan;*
  - *Materials Management Plan;*
  - *A Scheme for Construction Vibration Monitoring.*
- *Site Waste Management Plan;*
- *Ecological Mitigation Strategy;*
- *Construction Traffic Management Plan;*
  - *Public Rights of Way Management Plan;*
- Pollution Prevention Plan including emergency response;
- Training and Responsibilities Matrix.

2.8.5 Weekly environmental inspections shall take place on site. The findings of these inspections and any associated actions shall be appropriately documented on the Weekly Checklist.

2.8.6 The Senior Site Manager would liaise as necessary with the relevant authorities and regulatory bodies with regard to all consents, exemptions and licences. Any applications shall be made with consideration of appropriate timescales. A consents schedule shall be completed and held on site, detailing relevant information from date of application.

2.8.7 Where specific limitations are set through any licence, consent or exemption, this is to be clearly identified and regularly reviewed to ensure compliance.

2.8.8 The Site Emergency Response Procedure shall be found within the Pollution Prevention Plan.

Pollution Prevention Planning and Emergency Response

2.8.9 In the event of an Environmental Incident, procedures shall be followed to ensure risks of further spillages / migration of pollutants are minimised. Procedures would contain a clear detailed plan of the site which indicates the location of sensitive receptors such as watercourse, drainage and bore holes.

2.8.10 An appropriate number of spill kits would be located within these areas and clearly marked on the plan. It is the responsibility of the Senior Site Manager to ensure all

spill kits are fully stocked at all times, and an inventory of equipment within the container to be clearly displayed within the lid.

2.8.11 Drip trays would be utilised under machinery where there may be a risk of leaks of oil and diesel.

2.8.12 The Pollution Prevention Guidance PPG22: Dealing with Spills, shall be followed to prevent, limit or reduce damage to the environment and risk to public health from a spill.

Considerate Constructors Scheme

2.8.13 The Applicant intends to register the TCCs with the Considerate Constructors Scheme (CCS). The CCS is a non-profit-making, independent organisation founded by the construction industry to improve its image. The CCS is neither grant maintained, nor funded by the government, and is solely financed by its registrations. The CCS Codes of Considerate Practice commit those sites and companies registered with the Scheme to be considerate and good neighbours, as well as respectful, environmentally conscious, responsible and accountable. Registered sites and companies must also consider their appearance and safety.

2.8.14 This commitment is maintained by the CCS monitoring registered sites and by the display of posters around the construction site, setting out the Code to which the sites or companies are committed. If passers-by wish to comment, the name and telephone number of the site management or company contact are clearly displayed alongside the freephone telephone number of the CCS's administration office.

2.8.15 A CCS Monitor would normally visit the site once a year. During the visit, the Monitor would assess the perimeter of the site, the access to the site offices and the facilities provided for the operatives. The Monitor would also review whether the site's procedures are in accordance with the Scheme's Code of Considerate Practice.

2.8.16 The Monitor would write a report for the Senior Site Manager and this would include the score achieved against each of the eight categories of the Scheme's site Code of Considerate Practice. The purpose of this score is to indicate how well the site is performing against the Code.

2.8.17 The Proposed Development would comply with the CCS site Code of Considerate Practice and target to achieve and maintain a high score on each site monitor's visit. The site shall clearly display the associated posters and banners allowing local residents to identify all contact numbers. The Applicant and the Principal Contractor would ensure all works carried out are undertaken in a manner which not only ensures best practice, but also minimal cause for complaint by the public and disruption to third parties.

Consultation with the Public

2.8.18 The Applicant would develop a Stakeholder Communications Plan and establish a Local Liaison Committee with a membership including representatives of the local community. This would be involved in deciding what engagement with the local community is required prior to work commencing on site. It is the Applicant's

intention that the Committee is established early in the project, in advance of DCO submission.

2.8.19 In conjunction with appropriate mitigation, operating hours and employee training, handling public relations in an appropriate way would help to reduce the potential for complaints. 'Building Research Establishment's (BRE): The Pollution Control Guide: Part 1 – Pre-Project planning and effective management' makes recommendations regarding the handling of public relations. These recommendations would be implemented at the site.

2.8.20 Notice boards on the site perimeter fencing would display telephone and email contacts for enquiries and receipt of complaints, and the name of the persons who should be contacted. All complaints arising from the construction activities would be investigated to:

- Identify the cause of the complaint;
- Identify and implement appropriate measures to address the cause of the complaint in a timely manner;
- Record the complaint, and any measures taken, provide feed back to the complainant and make the complaints log available to the local authority when requested.

Site Environmental Documentation and Training

2.8.21 All environmental documentation must be retained on site at all times and be available for inspection by internal and external auditors, as well as the client and management. The folder structures would conform to the Applicant's and Principal Contractor's document control systems. Where any document is amended, previous versions would be superseded and documents transmitted in line with procedures. Site personnel would be made aware immediately, if any significant changes in works procedures are implemented.

2.8.22 Initial start-up documentation would include the following:

- Site Set-Up Checklist;
- Impacts and Aspects Matrix;
- Environmental Risk Assessment;
- Construction Environmental Management Plan;
- Training and Responsibilities Matrix;
- Project Consents Schedule.

2.8.23 All relevant site personnel would be receive a Health, Safety and Environment based training course.

2.8.24 The Principal Contractor would arrange induction training at the commencement of construction for all site personnel.

2.8.25 In addition, the Principal Contractor shall develop and deliver 'toolbox talks' as appropriate throughout the construction phase. The toolbox talks would act as

refresher sessions of key topics covered in the induction training. Potential topics for toolbox talks could include:

- Identification and management of invasive species;
- Identification and management of protected species;
- Best practice pollution prevention and control.

2.9 Environmental Inspection and Audits

2.9.1 The Principal Contractor would be required to undertake a programme of weekly environmental inspections and biannual environmental audits to record performance and identify any corrective actions required. It is the responsibility of the Senior Site Manager to ensure all documentation and evidence required for audit purposes is kept up to date and freely available for inspection at all times. Any system failures would be documented and appropriate corrective actions issued and implemented.

2.10 Environmental Incident and Near Miss Reporting

2.10.1 A system for reporting environmental incidents or potential hazards would be developed. All reported incidents or hazards would be logged in a database to allow review, auditing and lessons learned.

3. Topic-Specific Management Measures

3.1 Environmental Risk Assessment

3.1.1 An Environmental Impact Assessment (EIA) is being undertaken as part of the consent application process which would identify and assess the aspects of construction that could have an environmental impact. All proposed mitigation measures described in the EIA would be applied and described in the applicable sections of this CEMP. The following topics relevant to this CEMP are considered in the EIA:

- Traffic and Transport;
- Noise and Vibration;
- Air Quality;
- Historic Environment;
- Biodiversity;
- Hydrology; and
- Geology, Hydrogeology and Contamination.

3.1.2 The information obtained through the EIA would be used to determine the mitigation methodology to be utilised during construction. Where significant risks are identified, specific management plans are to be put into place and details of these would in due course be found within the outline CEMP which would be submitted with the DCO application. Each management plan would be thoroughly assessed by all project management and method statements would incorporate the mitigation for the assumed risk. Any changes to work packages must be reassessed prior to any commencement of work.

3.2 Guidance for Pollution Prevention

3.2.1 Guidance for Pollution Prevention (GPPs) documents are gradually replacing the old series of guidance document (PPGs). The new series provide environmental good practice guidance for the whole UK. There are currently 29 guidance documents available at:

https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/

3.2.2 Any activities during the construction process shall be undertaken in line with the guidance set out in these documents.

3.3 Construction Nuisance

3.3.1 Complementing the detailed consideration of environmental management measures identified within the EIA-specific topics is the matter of ‘nuisance’

associated with construction and covers the issues of Dust, Noise, Vibration, Lighting and Waste Management. The following sections detail activities and control methods to be implemented for the Proposed Development.

Dust

3.3.2 Mechanical disturbance of granular material exposed to air creates atmospheric dust, this type of dust generation is termed as 'fugitive' as it is not discharged into the atmosphere in a confined stream. The potential sources of these fugitive dust emissions are:

- Site clearance;
- On site earth moving operations, site levelling, cut and fill etc;
- Vehicle movements over haul roads;
- Vehicle movements on site during dry periods;
- Wind blowing across the site during dry periods;
- Stockpiling of excavated materials;
- Cutting and grinding;
- Accidental spillage and loss of load from vehicles carrying loose material; and
- Deep excavations.

3.3.3 The generation of this fugitive dust requires consideration of additional factors such as:

- Prevailing wind (speed, direction);
- Prevailing climate, including rainfall;
- Location of sensitive receptors (including residential and commercial properties, habitats and watercourses.)

3.3.4 Prevailing winds are specifically important when considering fugitive dust. The speed of winds can determine the dispersion of dust; high winds can increase the initial generation of dust, in addition to carrying the dust over greater distances.

3.3.5 Appropriate preventative measures to control dust emissions can significantly reduce the potential for dust generation. Implementation of the methods identified within **Chapter 8: Air Quality, Table 8.25** and **Chapter 6, Appendix 6A: Preliminary Construction Traffic Management Plan** would help to minimise risk:

Construction Traffic

- All construction traffic would follow specifically designated routes;
- Speed limits would be put into place on site for all vehicular movements;
- All vehicles carrying loose material would be covered; and
- Wheel cleaning facility to be used for vehicles leaving site.

Highways

- Where appropriate, use of road sweepers would be incorporated to ensure the site entrance gates remains clear of dust and mud; and
- Road edges and pathways would be swept by hand and damped down as necessary.

Stockpiles

- To be sealed or sprayed with chemical bonding agents as required;
- Location of stockpiles away from any sensitive receptors; and
- To be seeded to allow the growth of grass if stockpiled for long periods of time.

Dust Suppression

- Mobile bowsers to be deployed on site at regular intervals. Activity to be increased during significantly dry and windy periods;
- Where necessary, use of hoardings to be considered to ensure reduction in dust migration;
- Deliveries of significantly dusty materials to be sprayed to reduce dust potential; and
- All cutting and grinding operations to be conducted in ways to reduce risk of dust migration (wet cutting techniques etc.).

Monitoring

- Ongoing daily monitoring to be undertaken by site personnel on regular basis, both on and off site to ensure no migration of dust;
- Regular liaison with the Applicant to be undertaken; and
- Regular reviews of mitigation methodology to be undertaken by the Project Manager and HSE Manager.

Noise

3.3.6 Noise has the potential to cause disturbance. Therefore, it is essential that the works comply with any requirements which may form part of the DCO and relate to work that could reasonably be expected to cause noise, for example, the use of plant and equipment, hammering, drilling etc.

- Hours of work would be restricted to the hours of 07:00 to 19:00 Monday to Friday, 08:00 to 16:00 Saturday and no work on Sundays or Public holidays without prior approval from the relevant planning authority. A list of possible exceptions is included within **Chapter 3: Description of the Proposed Development, Section 3.9** and includes:
  - Continuous and over running concrete pours;
  - X-ray weld testing;

- Mechanical and electrical fit out;
- Abnormal load deliveries;
- Abnormal lifts; and
- Pipe bridge works over Weasenham Lane (CHP Connection).
- Horizontal directional drilling; and
- UGC/OHL road crossings.

- Furthermore 1-hour before and 1-hour after the core working hours, some mobilisation activities would occur and include;
  - Arrival and departure of the workforce at the site and movement to and from areas across the project;
  - Site inspections and safety checks; site meetings (briefings and quiet inspections/walkovers);
  - Site clean-up (site housekeeping that does not require the use of plant); and
  - Low-key maintenance including site maintenance, safety checking of plant and machinery (provided this does not require or cause hammering or banging).
  - Mobilisation activities would not include HGV movements into and out of the TCCs.

3.3.7 Where work is required to be undertaken outside of the core working hours this would be with the prior agreement of the relevant planning authorities and would be conditional on the contractor informing local residents in advance of the proposed activity

3.3.8 A construction noise management plan would be developed which would detail noise limitations to be set on site and set locations would be identified for noise monitoring and a system in place for recording complaints or concerns from local residents.

3.3.9 Good relations with people living and working in the vicinity of site operations are of paramount importance. Early establishment and maintenance of these relations throughout the carrying out of site operations would contribute towards allaying people's fears. The Local Liaison Committee would be established before construction commences. Good relations can be developed by keeping people informed of progress and by treating complaints fairly and expeditiously.

3.3.10 Noise can also interfere with working efficiency of site workers by inducing stress, by disturbing concentration and by increasing accident risk. Effects of noise on persons on site are similar to the effects on nearby residents, and the benefits of good control measures would apply equally on and off site.

3.3.11 Noise levels would be monitored at the sensitive locations nearest to the site during the main construction works. The noise monitoring programme would be undertaken by the Senior Site Manager. All noise level monitoring equipment used would be well maintained and calibrated in accordance with manufacturer's guidance. Logs

of all noise monitoring would be kept within the site files and would be made readily available for inspection. The following would be noted at each identified sensitive receptor when noise monitoring is being undertaken.

- Time;
- Weather conditions and wind direction;
- Location of monitoring;
- Background noise level;
- LAeq dB reading over the relevant time period.

3.3.12 All results would be monitored against the predicted noise levels detailed within the Environmental Statement.

3.3.13 Where any noise complaints are received, these would be thoroughly investigated by the Senior Site Manager, actions implemented to ensure repetition of the issues are avoided, and feedback on the investigation given to the complainant. In addition, the site team would embrace best practice measures with regards noise minimisation in accordance with BS 5228:1-2009+A1:2014. Best practice measures would include:

- All construction plant and equipment would comply with EU noise emission limits;
- Plant would be serviced regularly to minimise adverse noise impacts;
- All vehicles and mechanical plant used for the purpose of the works would be fitted with effective exhaust silencers and maintained in good efficient working order;
- Selection of inherently quiet plant where appropriate. All major compressors would be ‘sound reduced’ models fitted with properly lined and sealed acoustic covers which would be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools would be fitted with mufflers or silencers of the type recommended by the manufacturers;
- Machines in intermittent use would be shut down in the intervening periods between works or throttled down to a minimum;
- Plant and equipment such as flatbed lorries, skips and chutes would be lined with noise attenuating materials. Materials would be handled with care and be placed, not dropped. Materials would be delivered during normal working hours, other than exceptional events such as concrete pours and large indivisible loads when local residents would be informed in advance;
- Plant reversing near dwellings have banksmen in place of ‘beepers’; and
- All ancillary plant such as generators, compressors and pumps would be positioned so as to cause minimum noise disturbance where possible, i.e. furthest from receptors or behind close boarded noise barriers.

Vibration

3.3.14 It is anticipated that the works should not pose any significant risks in relation to vibration beyond the site boundary. A scheme for construction vibration monitoring, and details of procedures to identify and avoid any potentially significant effects would however be prepared and submitted to the relevant planning authorities for approval prior to construction starting. Further details of which would be provided in the final Outline CEMP.

3.3.15 Best practice should be utilised at all times and ongoing monitoring undertaken. Continuous Flight Auger (CFA) and Secant Piling Techniques may be used as an alternative to driven precast piling to mitigate vibration impact if this is considered necessary. Speed would be limited to 5mph on un-surfaced site roads and 10mph on properly surfaced and maintained site roads.

3.3.16 Where it is considered that vibration may pose an environmental risk, this would be fully investigated by the Senior Site Manager and HSE Manager and suitable mitigation measures put in place.

Lighting

3.3.17 The following mitigation and best practice would be implemented:

- Adequate lighting of working areas is an essential safety consideration and lighting units would be placed in such a way as to pose minimal risk of light disturbance;
- Lighting would be suitable for the works being undertaken;
- Unnecessary lighting would be removed;
- Lights would be switched off when they are not needed; this would include periods outside of normal site working hours;
- Any security lighting would be kept to a minimum at all times, for example using passive infrared lights; and
- Checks would be made each evening to ensure no lights are left on in error.

3.3.18 Additionally, lighting arrangements would also take into consideration the potential disturbance of wildlife and ecology. The lighting design would minimise the impacts of light spillage on adjacent retained habitats through the attachment of directional hoods to lights and the use of low pressure sodium lamps. Non-essential lighting would be fitted with automatic cut-off switches.

Waste Management System

3.3.19 The site would implement a Site Waste Management Plan which describes the procedures for the management of waste arising from the construction activities. A Site Waste Management Plan to control the storage, use, reuse, recycling, recovery and disposal of materials during construction shall be prepared.

3.3.20 The Site Waste Management Plan (SWMP) would be produced to allow the tracking of contaminated soils, showing their point of origin, characterisation and proposed

method to deal with them. The plan would be produced prior to the commencement of works, but it would be continually updated and shall incorporate information obtained from site data, which would support the rationale for the methods of re-use or disposal. The plan would incorporate details of contingencies that can be initiated in the event of unexpected occurrences.

Site Waste Procedures

3.3.21 Reviews of site waste procedures would be undertaken at 3 monthly intervals, or less if required. Site personnel would be trained in accordance with the waste procedures.

Segregation of Waste

3.3.22 To ensure maximum potential for reducing waste to landfill, and encouraging, recycling and recovery, waste would be segregated. Separate skips would be made available for all types of waste. Each skip would be clearly labelled and site personnel would be informed of procedures within the induction. Regular monitoring would be undertaken to ensure correct procedures are followed at all times. The skips would be emptied at regular intervals to prevent overfilling. Toolbox Talks would be undertaken with all site personnel to ensure full understanding of waste procedures.

Disposal of Non-Hazardous Waste

3.3.23 All non-hazardous waste would be removed from site within strict adherence to all waste legislation requirements, including Duty of Care Regulations. Prior to any agreed use of hauliers or waste disposal sites, the appropriate license's would be thoroughly checked to ensure that particular waste streams can be accepted and carrier licences are valid. This can only be undertaken by authorised personnel and copies of all necessary licences must be retained on site at all time and reviewed for expiry. No waste would leave site without appropriate waste transfer notes. It is essential that all waste transfer notes are inspected for detail and must contain the correct description of waste as well as the correct waste code, in line with the List of Waste Codes. Only authorised and fully trained personnel may sign waste transfer notes. Both regular and random audits would be undertaken to ensure correct procedures are being followed.

Disposal of Hazardous Waste

3.3.24 Although limited hazardous waste arisings are expected, the site must be registered as a producer of Hazardous Waste. No hazardous waste must leave site without the correctly completed Consignment. Note. The consignment notes must contain all necessary information including waste description and hazardous waste registration number. Any carriers removing hazardous waste must have appropriate licences and disposal sites must be verified to be able to accept waste being sent. These checks and signing of consignment notes can only be undertaken by authorised personnel. All hazardous waste must be stored on site in appropriate, covered or locked skips. No mixing of hazardous and non-hazardous waste is authorised.

Waste Reporting and Records

3.3.25 All waste transfer and consignment notes would be held on site throughout the duration of the project.

3.3.26 Each waste transfer would be fully documented and updated accordingly. Each month, the project team, detailing the exact movements of the previous months waste, including destination and treatment, would compile a comprehensive waste report. These reports would be forwarded to the EPC Contractor head office for analysis. Regular auditing would be undertaken of all waste management systems.

Material Management

3.3.27 A Materials Management Plan (MMP) would be prepared that outlines where excavated non-waste materials would be reused in line with the CL:AIRE Definition of Waste Code of Practice (DoWCoP). The MMP would include a declaration by a Qualified Person that the MMP has been completed in accordance with the CL:AIRE Definition of Waste Code of Practice (DoWCoP) and that best practice is being followed.

3.3.28 Any temporary onsite storage of excavated materials suspected or confirmed to be contaminated would be on impermeable sheeting, covered over and with adequate leachate/ runoff drainage to prevent migration of contaminants from the stockpile. Materials would be segregated where possible to prevent cross-contamination occurring. Such materials would only be reused if they are confirmed as suitable for use in line with the requirements of the Materials Management Plan (MMP).

3.3.29 In addition to the management of potential construction nuisance, the following topic-specific matters are to be considered. Further detail on the proposed measures relevant to each topic would be provided in the outline CEMP submitted with the DCO application as the EIA evolves and specific management plans (where appropriate) are developed. Indicative issues, where not covered in the material presented above are set out below.

3.4 Traffic and Transport

3.4.1 Effects arising from construction traffic have been identified and reported within the Preliminary Environmental Information Report, **Chapter 6: Traffic and Transport**. A Preliminary Construction Traffic Management Plan has been produced to mitigate the effects arising from construction traffic upon the environment **Chapter 6: Traffic and Transport, Appendix 6A: Preliminary Construction Traffic Management Plan**. This document would be issued with the CEMP and would be one of a suite of topic specific construction management plans prepared to mitigate construction effects.

3.4.2 A final Construction Traffic Management Plan would be produced in advance of construction and would be agreed with the relevant planning authorities in consultation with the highway authorities. The Construction Traffic Management Plan would set out actions to reflect the mitigation measures included in the ES and would include details of construction vehicle routing; site accesses; the management of junctions to and crossings of the public highway; the scheduling and timing of movements, including the details of abnormal load movements; and

temporary warning signs. The plan would outline timings of deliveries and routes to be taken by hauliers to ensure minimal disruption to local residents and businesses. This would include potential risk for noise disturbance as well as minimising additional traffic during peak periods.

3.4.3 **Chapter 6: Traffic and Transport** also includes **Appendix 6B Preliminary Public Rights of Way Management Plan.** This identifies three PRoWs which would be directly affected by the Proposed Development as presented within the PEIR. These are:

- Byway 266/21 – temporary effect of a construction access route to a construction access (shared routes);
- Restricted Byway RB5 – temporary effect of an onsite construction access route; and
- Footpath BR9 – temporary effect from the crossing of the OHL route.

3.4.4 The Public Rights of Way Management Plan would set out the mitigation measures to ensure that users of the PRoWs are safeguarded during construction activities.

3.5 Noise and Vibration

3.5.1 Outline arrangements for the control of noise and vibration arising from construction activities have been provided in **Section 3.3**. If the final noise and vibration assessment which would be presented in the ES identifies any significant effects, the mitigation measures required to reduce and avoid the effects would be detailed in the Construction Noise Management Plan.

3.6 Air Quality

3.6.1 Outline arrangements for the control of dust arising from construction activities have been provided in **Section 3.3**. If the final Air Quality assessment which would be presented in the ES identifies any significant effects, any additional dust mitigation measures required to reduce and avoid the effects would be detailed in a Construction Dust Management Plan.

3.7 Historic Environment

3.7.1 **Chapter 10: Historic Environment** recognises that there is the potential for direct effects arising from construction activities upon buried deposits of potential archaeological or geoarchaeological interest. Excavations would be undertaken in accordance with a Written Scheme of Investigation (WSI). This would require the presence on site of an archaeologist who would ensure that the following procedure is followed in the event of a find:

- Immediately stop works in the area of the find;
- Protect the find and the area surrounding by fencing / blocking off and immediately contact the site manager;

- Contact the archaeologist and obtain advice on how to proceed;
- Allow time for the consideration, recording and evaluation of the find should this be the advice of the archaeologist; and
- Ensure that all significant finds are reported.

3.8 Biodiversity

3.8.1 Ecological surveys are in progress as detailed in **Chapter 11: Biodiversity**. The findings of which would be used to inform the final design of the Proposed Development such that effects upon ecological and ornithological receptors are avoided or minimised. The final Outline CEMP submitted with the DCO application would accompanied by an Ecological Mitigation Strategy outlining any species or habitat-specific controls considered appropriate to provide additional management advice and safeguards during construction. These are likely to include controls and procedures for the following:

- Reasonable avoidance measures and general ecological good practice measures;
- Projection of habitats such as hedgerows, watercourses and veteran trees; and
- Protection of Protected Species, likely to include badgers, water voles, otter, bats, great crested newt, reptiles and breeding birds.

3.8.2 An Invasive Species Management Plan would also be prepared, including biosecurity measures.

3.9 Hydrology

3.9.1 To ensure that impacts upon the water environment are controlled during construction **Chapter 12: Hydrology** lists a number of mitigation measures which would be implemented:

- Implementation of good working practices;
  - Good working practices would be implemented during construction, with adherence to relevant guidance including the Environment Agency's PPGs, with particular emphasis being placed on adherence to PPG5, 'Works and maintenance in or near water' and PPG6 'Working at Construction and Demolition Sites', CIRIA's Control of Water Pollution from Construction Sites guidance (C532) and Environmental good practice on site guide CIRIA (C741). Whilst the PPGs have been withdrawn, the guidance to working practices is still relevant and useful. A monitoring schedule would be implemented by the contractor to ensure that the measures taken to protect the surface water environment are effective. Where relevant to the activity undertaken, IDB codes of practice would be followed.
- Drainage Management Plan
  - Details of construction phase drainage management measures to be developed by the appointed contractor after the DCO has been granted

would be presented in a DMP. The DMP would be submitted to and approved by the relevant planning authorities prior to commencement of construction. Drainage would be designed in accordance with Sustainable Drainage (SuDS) principles including allowances for climate change. Any discharge into the HWIDB and KLIDB drains would be attenuated and, if necessary, treated.

- Management of soil stockpiles, including the management of excavated materials during construction works in accordance with agreed Material Management Plan.
- Fuel/oil/chemicals storage
  - Fuel storage would be in accordance with the Control of Pollution (Oil Storage) (England) regulations 2001 and other Pollution Prevention Guidelines (PPGs). Requirement for an effective accident response protocol to ensure any spillages or potential pollution incidents are dealt with appropriately including the provision of containment for spills of contaminated liquids. Any tanks and associated pipe work containing oils, fuels and chemicals would be double skinned and provided with leak detection equipment. All stores of fuel would be located at least 20m from any watercourses and away from areas at risk of flooding.

3.10 Geology, Hydrogeology and Contamination

3.10.1 The following principles would be adhered to in the management and handling of soils:

- All soil handling, placing, compaction and management shall be undertaken in accordance with best practice (DEFRA, 2009);
- Consideration of land access in relation to soil type and safe working periods for machinery;
- Topsoil from areas currently in agricultural use to be stripped before the start of general construction works;
- Soils shall be categorised on the basis of their type, condition and origin, and stockpiled/stored in line with best practice (i.e. under the driest conditions possible and gathered by tracked/wide-tyre vehicles to reduce compaction);
- Movement and transportation of soils to be kept to the absolute minimum to reduce the risk of contamination between fields;
- Soils suitable for reuse as part of wider mitigation (e.g. planting areas) to be reused in a broadly similar location to their origin, and stored for the shortest amount of time permissible; and
- Opportunities for the re-use of any surplus soils would be explored to avoid the potential for clean soils to become waste.

4. Next Steps

4.1.1 This document represents the first drafting of an Outline CEMP. An updated Outline CEMP would be prepared for submission with the DCO application. The Outline CEMP would be informed by the results on continuing survey work and assessments, and the development of the design of the Proposed Development which would itself be informed by the results of statutory consultation and ongoing, informal consultation with key environmental bodies.

4.1.2 The Outline CEMP would be secured as a requirement of the DCO. This requirement would also require the preparation of a final CEMP which would then be submitted to and approved by the relevant planning authorities prior to the commencement of construction. The final CEMP must be substantially in accordance with the Outline CEMP