The Millbrook Power (Gas Fired Power Station) Order

6.2 Environmental Statement Appendices – Volume D Appendix 3.1 Key Mitigation Roadmap

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3.1 Key Mitigation Measures Roadmap

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Environmental Aspect	Project Stage	Measures	ES Document Reference	Where this mitigation is secured
General - CEMP	Construction	During Construction of the Project a Construction Environmental Management Plan (CEMP) would be followed. The CEMP would set out best practice construction methods and safe working practices to be followed so as to limit construction impacts on the environment. Specific items included in a CEMP for the Project are discussed below topic by topic. An outline CEMP for the Project is provided as Appendix 3.2 of the ES.	3.6.3	DCO Requirement 10 which sets out the need for a CEMP
Air Quality	Construction	Best practice measures to limit dust would be set out in the CEMP. This includes mitigation relating to: site planning, construction activities and site activities. Key measures include wheel washing, damping down of stockpiles during dry and windy conditions, and sheeting materials to prevent dust migration. Good site management practices (e.g. adherence to guidance such as 'control of dust and emissions from construction and demolition, best practice guidance' 2006) during the construction works will help to prevent the generation of airborne dust. It will be the responsibility of the nominated main contractor and site manager to ensure through the CEMP that sufficient precautionary measures to limit dust generation are undertaken. Additionally, standard mitigation measures for low risk sites, taken from the Institute of Air Quality Management (IAQM) document 'Dust and Air Emissions Mitigation Measures' tables would also be applied. These are: • Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken; • Make the complaints log available to the local authority when asked; • Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in a log book; • Avoid bonfires and burning of waste materials on site; and • Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.	3.6.4 - 3.6.5	CEMP - DCO Requirement 10
Air Quality	Operation	The Project has been designed from the outset to comply with legislative limits for the emissions of pollutants, particularly NOx. Together, NOx control on the turbine (through dry low NOx burners) and an appropriate stack height to ensure adequate dispersion of pollutants (between 32.5 and 35m) mean that breaches of assessment levels for pollutant concentrations during operation of the Project will be extremely unlikely under normal operating conditions.	3.6.6	Stack height will be set by DCO requirement 2 covering the Project Design. Emission limit values - will be secured as part of the Environmental Permit
Noise and Vibration	Construction	The CEMP would incorporate best practice working methods such as: • All construction activities would be undertaken in accordance with the recommendations of BS 5228 'Noise and Vibration Control on Construction and Open Sites' Part 1 Noise and Part 2 Vibration; • Construction works shall not take place outside the hours of 07:00 – 19:00 Monday to Friday and 07:00 – 13:00 on a Saturday, with no working on Sundays or Bank Holidays unless otherwise agreed with BBC / CBC;	3.6.7	CEMP - DCO Requirement 10 Construction Hours - DCO Requirement 13 CTMP - DCO Requirement 11

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		• Only plant conforming with relevant national or international standards, directives or recommendations on noise or vibrations emissions would be used; • Construction plant will be operated and maintained appropriately, having regard to the manufacturer's written recommendations or using other appropriate operation and maintenance programmes which reduce noise and vibration emissions; • All vehicles and plant would be switched off when not in use; • Approved routes and programming for the transport of construction materials, spoil and personnel to reduce the risk of increased noise and vibration impacts due to the construction of the Project; • Vehicle and mechanical plant used for the purpose of the works should be fitted with effective exhaust silencers, to be maintained in good working order and operated in such a manner as to be maintained in good working order and operated in such a manner as to minimise noise emissions. The contractor should use plant items that comply with the relevant EU/UK noise limits applicable to all equipment; • All ancillary plant such as generators, compressors and pumps would be positioned so as to cause minimum noise disturbance (e.g. as far away as practicable from sensitive receptors). If necessary, temporary acoustic barriers or enclosures would be provided; • The positioning of construction plant and activities to minimise noise at sensitive receptors such as residential properties; • Equipment that breaks concrete by munching or similar, rather than by percussion, should be used as far as is practicable; • The use of mufflers on pneumatic tools; • Where practicable, rotary drills actuated by hydraulic or electrical power should be used for excavating hard materials; • The use of non-reciprocating construction plant where ever practicable; • The use, where necessary, of effective sound reducing enclosures; • The targeting, where possible, of noisy work at times which minimise disturbance; and • The contractors would be required to produce a noise control plan as part of the CEMP which would provide a noise management system tailored to the specific needs of the construction activities, the Project Site and the surrounding areas. As a minimum the noise control plan would include: • Procedures for ensuring compliance with statutory or other identified noise control limits; • Procedures for minimising the noise from construction related traffic on the existing road network; • Procedures for ensuring that all works are carried out according to the principle of "Best Practicable Means" as defined in the Control of Pollution Act 1974; • General induction training for site operatives and specific training for staff having responsibility for particular aspects of controlling noise from the Project Site; • A noise monitoring/auditing programme; and		

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		• Liaison with the EHO at the LPA and the community.		
Noise and Vibration	Operation	The design of the Project is such that the noisiest plant items (the Gas Turbine Generator and Fin-Fan Coolers) have been located as far away as possible from the nearest residential receptor (South Pillinge Farm, located approximately 390 m to the west of the Gas Turbine Generator), within the constraints of the Project Site.	3.6.8	DCO requirement 2 covering the Project Design.
Noise and Vibration	Operation	Noise levels from the Power Generation Plant at the nearest noise sensitive receptor (South Pillinge Farm) would not exceed background levels.	3.6.9	DCO Requirement 12 setting out operational noise limits.
Noise and Vibration	Operation	If any abnormal operations occur which lead to noise levels in excess of the agreed planning limits (e.g. any equipment malfunction), the operator will inform the local authority and residents of the reasons for these operations, and the anticipated emergency period.	7.9.4	Operational environmental Management Plan, which will be secured through the Environmental Permitting Regulations.
Noise and Vibration	Operation	To ensure that any agreed noise limits are not exceeded and to ensure that any breaches can be remedied, it is recommended that noise limits are set at specific measurement locations to be agreed with the relevant planning authorities.		DCO Requirement 12 setting out operational noise limits.
Ecology	Construction	Appropriate regard for the protection of habitats and protected species during the construction works will be included within the final CEMP and will incorporate the following measures: • Work compounds and access tracks etc. will not be located in, or adjacent to, areas that maintain habitat value wherever possible. This includes surface water management ditches, and areas of tree and scrub planting; • Site fencing will be used to prevent access to areas outside working areas, particularly in areas adjacent to features of ecological value; • Procedures will be implemented to address site safety issues, including storage of potentially dangerous materials; and • Briefings and instruction would be given to contractors regarding the biodiversity issues associated with the Project Site.	3.6.10	CEMP - DCO Requirement 10
Ecology	Operation	As per air quality considerations, the stack height has been set so as not to give rise to emissions which would impact sensitive ecological sites.	3.6.11	DCO Requirement 2 covering the Project Design.

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Ecology	Operation	The Landscape and Ecology Mitigation Strategy for the Project will ensure that any habitats of ecological value that would have been created as part of the LLRS (in the absence of the Project) will be incorporated into the design of the Project. This includes surface water management ditches (albeit with minor realignments to the north and south of the Generating Equipment and Substation), and areas of tree and scrub planting. Should the construction of the Access Road result in the loss of any vegetation, this would be replanted with appropriate native species. In addition, the enhancement of retained vegetation and creation of new habitats, through tree and hedgerow planting and new ponds (as detailed in the Landscape and Ecology Mitigation Strategy) would be expected to result in a net gain in biodiversity.	8.9.2	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
Ecology	Construction	The management measures identified below are required in order to avoid the incidental mortality/injury of Great Crested Newts during the implementation of the Project, and to ensure that the favourable conservation status of the local great crested newt population is maintained. Great Crested Newts should be considered with regard to the following works in particular, as identified through the ecological assessment within the EIA: • Any requirement to carry out the works under a precautionary method statement included within the CEMP or a derogation licence issued by Natural England to ensure that no newts are harmed during the construction process, will be determined prior to construction; • If required, appropriate mitigation measures will involve the appropriate timing of works, avoidance of suitable terrestrial habitat as far as possible, and the careful removal/ dismantling by hand of any suitable refugia beneath the footprint of the works; • The working width of the Gas Connection through the hedgerows will be minimised as far as possible and gaps will be used in the hedgerows to reduce the habitat loss.	8.9.8	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES. DCO Requirement 10 - CEMP.
Ecology	Construction	A small number of ponds/ scrapes have been incorporated into the landscape design for the Project, which will be specifically designed to be of value for great crested newts. They will have shallow sloping edges planted with marginal vegetation to provide egg laying opportunities for newts.	8.9.9	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.

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Environmental Aspect	Project Stage	Measures	ES Document Reference	Where this mitigation is secured
Ecology	Construction	The working width through the hedgerows associated with the route of the Gas Connection will be minimised as far as possible and gaps will be used in the hedgerows to reduce the habitat loss.	8.9.13	DCO Requirement 3 which sets out the need for a Landscape and Ecology Mitigation Strategy / Plan to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
Ecology	Construction	A strip of plantation woodland (indicated by Target Note 2 on Figure 2, Appendix 8.1) will require removal within 250 m of Pond C, the area of trees which require clearance has been reduced to 0.17 ha (85 m x 20 m), and a proportion of this vegetation will be coppiced/ pollarded to reduce ground disturbance. This would minimise any potential impacts in ecological receptors.	8.9.14	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
Ecology	Construction	Any elements of the Project affecting the limited areas of potential reptile habitat will give due regard to the legislation protecting common and widespread reptile species, i.e. protection against injury and killing. This will be achieved through the displacement of any reptiles present into areas of retained habitat within and adjacent to the Project Site prior to construction works commencing through the following approach: • Progressive removal of suitable low-lying vegetation, including long grass, ruderals and scrub, using hand-held tools. The final stages of clearance to ground level should take place during suitable climatic conditions at a time of year when reptiles are active (generally April to September inclusive); • Dismantling of any potential hibernacula or refugia by hand, including compost heaps and log piles; • Where appropriate, ground level clearance work will be overseen by a suitably experienced ecologist who would relocate any reptiles encountered to an area of suitable retained habitat within and adjacent to the site; • Following the clearance of vegetation, the vegetation will be maintained at ground level to prevent re-colonisation prior to works commencing. This will be outlined in the Landscape and Ecology Mitigation Strategy.	8.9.18	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.

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Environmental Aspect	Project Stage	Measures	ES Document Reference	Where this mitigation is secured
Ecology	Construction	Nesting birds are protected under the Wildlife and Countryside Act 1981. Any clearance or cutting of woody vegetation will avoid the breeding bird season (generally taken to be March to August inclusive) in order to avoid the destruction of active birds' nests. If this is not possible, the vegetation will be checked prior to removal for the presence of any active birds' nests. If active nests are present, an appropriate exclusion zone will be retained around the nest and such works will be delayed until the young birds have fledged and the nest becomes inactive. This will be outlined in the Landscape and Ecology Mitigation Strategy.	8.9.20	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
Ecology	Operation	The Project layout has been designed to ensure that the tree and scrub-lined Access Road, which was found to constitute an important resource for foraging and commuting bats will be retained. Similarly, the plantation woodland edge, field margins and road side hedgerows will be retained (as outlined in the Landscape and Ecological Mitigation Strategy).	8.9.23	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
Ecology	Construction	The lighting scheme associated with the operation of the Project has been sensitively designed to minimise potential impacts on bats. As a minimum, down-lighting and motion-sensitive lights will be used, and light spill will be minimised by the use of baffles, as appropriate to avoid disturbance effects on the known bat roost associated with the South Pillinge Farm. An outline lighting strategy in included as Appendix 11.4.	8.9.24	DCO Requirement 14 - setting out lighting strategy.
Ecology	Operation	The planting proposed has been designed to ensure the value for biodiversity is maximised, whilst performing a landscape screening function. This will involve the creation of a new structurally diverse and species-rich belt of woodland planting, to reflect the species composition within the wider Marston Vale Forest. The existing species-poor hedgerow would be augmented and additional planting and appropriate management of existing blocks of planted woodland would be expected to enhance their nature conservation value. Native species of local provenance will be used, wherever possible. These new areas of planting linking existing habitats would be expected to increase the connectivity of the site for wildlife.	8.9.28	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.

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Ecology	Operation	In addition, a series of small ponds will be created within the Project Site, designed to be of value to wildlife, with shallow sloping edges planted with marginal vegetation to provide egg laying opportunities for newts. This new pond creation would also contribute towards the current Froglife project in the Marston Vale, which is aiming to increase the number of ponds available for meta-populations of newts within the Vale. Indicative locations of ponds are included in the outline LEMMS, in Appendix 11.3 of the ES. The exact location of the ponds would be defined prior to construction, in liaison with stakeholders and would be included in the approved Landscape and Ecology Mitigation and Management Strategy.	8.9.29	DCO Requirements 3 and 4 which sets out the need for and implementation of a Landscape and Ecology Mitigation and Management Strategy to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
Water Quality and Resources	Construction	The CEMP will include best practice working methods to prevent water pollution. These will include: • Siting stockpiles away from watercourses; • Refuelling on areas of hardstanding only away from watercourses and surface drains; and • Installing construction site drainage.	3.6.12	CEMP - DCO Requirement 10
Water Quality and Resources	Construction	The most appropriate best practice crossing methods will be used for watercourses (in the context of the Gas Connection).	3.6.13	CEMP - DCO Requirement 10
Water Quality and Resources	Construction	All oil and chemical storage tanks and areas where drums are stored will be surrounded by an impermeable bund and located away from watercourses in accordance with COSHH Regulations 2002 and the Control of Pollution (Oil Storage) Regulations 2001. Single tanks will be within bunds sized to contain 110 per cent of capacity and multiple tanks or drums will be within bunds sized to contain the greater of 110 per cent of the capacity of the largest tank or 25 per cent of the total tanks contents. Empty drums and any drums that are identified as leaking will be removed from the Project Site as soon as possible and disposed of appropriately in accordance with the relevant legislation.	3.6.14	CEMP - DCO Requirement 10
Water Quality and Resources	Construction	Any surface water potentially contaminated by hydrocarbons will be passed through oil/grit interceptors prior to discharge.	3.6.15	Surface and Foul Water Drainage - DCO Requirement 7. CEMP - DCO Requirement 10 Surface and Foul Water Drainage - DCO Requirement 7

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Environmental Aspect	Project Stage	Measures	ES Document Reference	Where this mitigation is secured
Water Quality and Resources	Construction	Precautions would be undertaken to ensure that silt laden runoff, arisings or chemicals are not allowed to enter watercourses including the use of impermeable liners and fixing agents.	3.6.16	CEMP - DCO Requirement 10 Surface and Foul Water Drainage - DCO Requirement 7
Water Quality and Resources	Operation	During operation, the EA will set limits on the quality of water that is discharged from the Project Site under the Environmental Permit.	3.6.17	Surface and Foul Water Drainage - DCO Requirement 7. Secured through the Environmental Permitting Regulations.
Water Quality and Resources	Operation	Operational site drainage would be appropriately designed to meet the needs of the Project and would be managed by the LLRS drainage system. Any surface water contaminated by hydrocarbons would be passed through oil/grit interceptors prior to discharge.	3.6.18	Surface and Foul Water Drainage - DCO Requirement 7. Secured through the Environmental Permitting Regulations.

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Environmental Aspect	Project Stage	Measures	ES Document Reference	Where this mitigation is secured
Ground conditions	Construction	The CEMP would include best practice working methods to prevent pollution to the ground and groundwater. These would include: • Conduct a Foundation Works Risk Assessment (FWRA) by the contractor once the proposed foundation solutions are known (to form part of the CEMP) to prevent the proposed foundations from adversely affect the water environment beneath the site; • Construction activities will be carried out in full compliance with appropriate health and safety legislation, at current amendments, and with reference to appropriate guidance documents and approved Codes of Practice published by the HSE; • Where there is the potential for instability to occur, temporary works measures including trench sheeting in any excavations will be utilised. • Apply the following procedures if unidentified contaminant “hotspots” showing visual or olfactory evidence of contamination are discovered during construction works: Stop work immediately; Report the discovery to the Site Manager; Seal off the area to contain the spread of contaminants; Clear the area to ensure there is nothing that could cause fire or explosion; Contact the regulator or local authority once it is confirmed that contamination is found; Arrange for testing to be carried out/agree changes to the existing contamination strategy; Record details of the incident, including photos and relevant information; and any soils which are considered to be contaminated hotspots will be removed and disposed of by a suitably licensed contractor or treated onsite. • Material which is excavated and free from visual and olfactory evidence of contamination will be stockpiled/tested to assess its suitability for reuse on the Project Site. • Temporary dewatering pumps will be implemented, if significant groundwater flows are encountered within excavations; • Design and construction of piled foundations will be undertaken in accordance with EA guidance ‘Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination’ (EA, 2001), and therefore will follow best practice to ensure that groundwater mixing does not occur; • All water from dewatering activities shall either be transported off site by a suitably licensed contractor or treated on site. Any proposed discharges to existing land drains (or other surface water bodies) will be undertaken in accordance with the requirements of the EA Regulatory Position Statement on temporary water discharges from excavations. • Where soils are imported onto the Project Site, they shall be subject to testing to ensure they are not contaminated. • Imposition of speed restrictions onsite to minimise disturbance of bare surfaces. Measures shall be put into place to ensure that the length of time bare surfaces are left exposed are minimised. • Imposition of the following measures in accordance with the EA’s Pollution Prevention Guidance to ensure that silt laden runoff, arisings or chemicals are not allowed to enter watercourses:	3.6.19	CEMP - DCO Requirement 10 Scheme to deal with contamination of land and groundwater - DCO Requirement 8

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		○ testing of arisings to see whether they are suitable for reuse on site; ○ siting stockpiles well away from watercourses; ○ covering stockpiles in inclement weather; ○ use of impermeable liners; and ○ use of fixing agents. • Water inflows to excavated areas will be minimised by the use of lining materials, good housekeeping techniques and by the control of drainage in order to prevent the contamination of ground water. • Contractors should comply with the measures set out in the Protection of Workers and the general public during the development of contaminated land (HSE 1991) to minimise the risk of coming into contact with potentially contaminated materials, and, a guide to safe working on contaminated sites R132 (CIRIA 1996), if applicable; • Construction workers will wear appropriate PPE for the nature of works being undertaken. This will involve standard site PPE, plus overall, gloves and eye protection where required. • Any soils excavated which are considered to be potentially contaminated (e.g. visual or olfactory evidence) will be reported to site management and left alone until their appropriate treatment. Suitable training will be provided to site personnel to ensure the correct identification of potentially contaminated soils by olfactory means; • Site personnel will be made aware of the potential impact on ground and surface water associated with certain aspects of the construction works to further reduce the incidence of accidental impacts; • Any soils which are considered to be contaminated hotspots) will be removed and disposed of by a suitably licensed contractor or treated on-site. • Any material which is excavated and free from visual and olfactory evidence of contamination will be stockpiled and tested to assess its suitability for reuse on the Project Site. • If significant groundwater flows are encountered within excavations, then temporary dewatering pumps will be implemented. • In the relation to the potential to induce mixing of confined groundwater bodies by construction of piled foundations, the design and construction will be undertaken in accordance with EA guidance 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination' (EA, 2001), and therefore will follow best practice to ensure that groundwater mixing does not occur. • All water from dewatering activities shall either be transported off site by a suitably licensed contractor or treated on site. Any proposed discharges to existing land drains (or other surface water bodies) will be undertaken in accordance with the requirements of the EA Regulatory Position Statement on temporary water discharges from excavations; • Where soils are imported onto the Project Site then they shall be subject to testing to ensure they are not contaminated.		

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Ground conditions	Operation	Further ground assessments will form part of the additional mitigation measures required and will include Phase 2 investigations to confirm findings of Phase 1 studies to date, along with the determination of an appropriate foundation solution, any remediation required and a subsequent reappraisal of risk. There are not expected to be any effects following the implementation of these additional mitigation measures.	10.7.7	DCO Requirement 8 setting out the need for further intrusive ground investigations prior to construction. DCO Requirement 10 - CEMP
Ground conditions	Construction	A detailed assessment of the uplift forces acting upon any permanent buried structures will be undertaken following confirmation of the construction technique and therefore the mass of any buried structures. If uplift forces exceed the mass of the structure and any permanent contents, then foundations will be designed to accommodate uplift forces with appropriate factors of safety. Appropriate method statements and foundation works risks assessments will be developed in accordance with industry guidelines. A range of different foundation designs can all be incorporated within the boundary of the Generating Equipment Site.	10.9.1	DCO Requirement 10 - CEMP
LVIA	Construction	As the construction period is of a limited duration (approximately 22 months), significant mitigation to limit landscape and visual impacts is not anticipated. However, the following would be applied through a CEMP: • Land / vegetation clearance and occupation would be limited to the minimum area necessary for the works; • Temporary protection of vegetation and other vulnerable features to be retained would be undertaken in accordance with prevailing best practice; • Temporary storage of soils and other material considered of value for retention would be undertaken in accordance with prevailing best practice. Where practical stockpiles would be sited to screen the construction works from sensitive receptors such as PROW; • Construction areas would be laid out to minimise adverse impacts arising from temporary structures, construction activities and lighting; • Construction roads would be on the same alignment as permanent access roads where possible; • Use of construction site lighting outside normal working hours would be restricted to the minimum necessary for workforce and public safety, and for security. Directional luminaries would be used to limit unwanted light spills • Maintenance of tidy and contained site compounds; • Hoardings erected around the area of construction works, for reasons of creating a visual barrier to construction activities and also as a safety measure, to prevent access to the general public; • Temporal measures including the removal of all temporary structures and stockpiles when no longer required, and prompt reinstatement of construction areas; • Reinstatement of all agricultural land required temporarily during construction, and a five-year aftercare plan to seek to ensure land is returned to its former productivity; and	3.6.21	CEMP - DCO Requirement 10 DCO Requirement 3 which sets out the need for a Landscape and Ecology Mitigation Strategy.

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		• Replacement of all trees, shrubs and hedgerows removed to accommodate the Gas Connection and Electrical Connection, subject to planting constraints. Any planting would be maintained for a minimum of 12 months to ensure full and successful establishment.		
LVIA	Operation	An outline Landscape and Ecology Mitigation and Management Strategy (LEMMS) is included as Appendix 11.3 of the ES. The strategy seeks to implement appropriate landscape screen planting and enhancement on the Project Site and has been designed taking into consideration both the LLRS and any landscape planting proposed by Covanta for the Rookery South RRF Project.	8.7.3	DCO Requirement 3 and 4 which sets out the need for a Landscape and Ecology Mitigation and Management Strategy / Plan to be in line with the outline strategy and plan set out in Appendix 11.3 of the ES.
LVIA	Operation	The Applicant is working with appropriate advisors to ensure good design which will seek to blend the Power Generation Plant into the landscape as much as possible through layout, scale and external appearance and will be fit for purpose for the lifetime of the Project.	3.6.24	DCO requirement 2 covering the Project Design.
Traffic and Transport	Construction	Separate to the CEMP, the mitigation measures designed to limit potential impacts from construction phase traffic movements are described in an outline Construction Traffic Management Plan (CTMP (Appendix 12.4)) which would include: • Route Management Plan to direct HGVs away from the sensitive local transport network;¡ a traffic management scheme at the junction with Green Lane and the Access Road to control queuing and to ensure no blocking of the railway develops; • Traffic management scheme for the Gas Connection access at Houghton Lane; • Traffic management scheme for the Electrical Connection Access at Station Lane; • Construction Vehicle Parking Strategy to control the vehicle generation and minimise impact on the surrounding area; • Footpath management plan to ensure any footpath route affected by the works are protected, and that the pedestrians may use them safely; and • Abnormal Load Delivery strategy to manage the delivery to site of the major items of plant and apparatus that are indivisible.	3.6.25	DCO Requirement 11 setting out the need for a Construction Traffic Management Plan in line with the Outline Construction Traffic Management Plan and DCO Requirement 16 setting out the need for a construction travel plan.
Traffic and Transport	Operation	Whilst any significant mode shift away from the private car is unlikely for the Project - there are likely to be only five workers on site at the same time - a Travel Plan has been created specifically targeting employees to decrease the number of vehicles accessing the Project. This is contained in Appendix 12.2. A range of non-car Initiatives will be implemented to encourage the use of alternative modes of travel to the private car.	3.6.26	DCO Requirement 16 setting out the need for an operational Travel Plan.

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Lighting	Construction and Operation	The contractor should follow relevant guidance and legislation relevant to lighting, including: • Institution of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light, (2011); • The English Department for Communities and Local Government (DCLG) Guidance on Lighting in the Countryside: Towards Good Practice (1997); • Assessment of the Problem of Light Pollution from Security and Decorative Light produced by Temple and NEP Lighting Consultancy on behalf of Defra; • The Bat Conservation Trust – Bats and Lighting in the UK (May, 2009). • The Bat Conservation Trust (BCT) – Statement on the Impact and Design of Artificial Light on Bats; • Environmental Protection Act 1990 (as amended); • The general design objectives that will be used to ensure that potential adverse effects of lighting associated with construction of the Project are minimised are listed below: ○ Use appropriately designed luminaires for the task at hand; ○ Use louvres and shields to prevent undesirable light break-out; ○ Demolition and construction lighting should be directed away from all sensitive receptors; ○ Preference should be given to several, lower lighting units rather than tall, wide beam lighting units to illuminate large areas as it will limit light trespass, glare and sky glow from the Project Site; ○ Vehicle lights should be properly directed (conforming to MOT requirements) and lenses must be intact to prevent un-necessary glare and light intrusion; ○ Lighting should be reduced or switched off when not required for safety purposes. Security lighting should be kept at the minimum level needed for visual and security protection; and ○ Motion sensitive lighting will be used in order to avoid unnecessary lighting. • Light fittings will comply with the specifications and the requirements of CIE 150 (2003) and Institute of Lighting Engineer's Guidance Notes for the Reduction of Obtrusive Light.	3.6.29	DCO Requirement 14 - setting out lighting strategy.
Archaeology and Cultural Heritage	Construction	A programme of archaeological mitigation will be undertaken on the Gas and Electrical Connection as a requirement of the DCO. This has been agreed with the Central Bedfordshire Council's Archaeologist during consultations. The exact scope of these works will be agreed with the Council's Archaeologist following the granting of the DCO. Ahead of these discussions, it is envisaged that the mitigation will compromise the stripping of the Gas Connection under archaeological supervision followed by the full excavation and recording of archaeological features exposed.		DCO Requirement 9 which sets out the need for archaeological works prior to construction.

It is noted here that this document contains the key mitigation measures outlined in the ES and how these will be secured, often at a high level. Further detail is provided in the outline CTMP (Appendix 12.1 of the ES), the outline CEMP (Appendix 3.2 of the ES) and the Outline Landscape and Ecology Mitigation and Management Strategy (Appendix 11.3 of the ES).