## Riverside Energy Park

# Statutory Nuisance Statement

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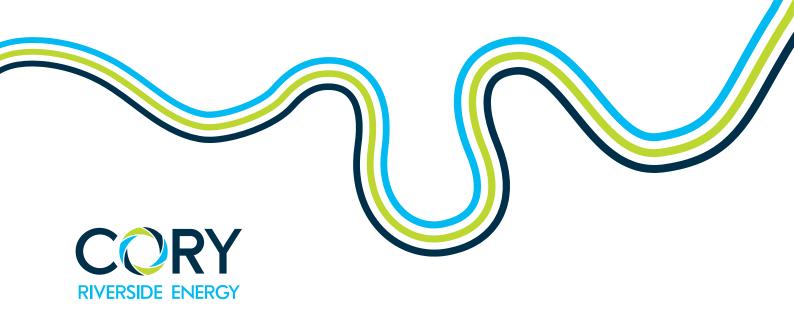
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## **Executive Summary**

This Statement has been prepared pursuant to regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (the "APFP Regulations") which provides that an application for development consent must be accompanied by:

"a statement whether the proposal engages one or more of the matters set out in section 79(1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them".

Section 79(1) of the Environmental Protection Act 1990, as it applies in England and Wales, provides for a series of matters which could constitute a statutory nuisance.

Of these matters, the Proposed Development could potentially engage the following:

- Air quality impacts that could engage paragraph (d);
- Noise impacts which could engage paragraphs (g) and (ga) 79(1);
  and
- Impacts from artificial light which could engage paragraph (fb) 79(1).

The potential effects of the Proposed Development in relation to these matters has been explored, taking evidence and results of assessments from the Environmental Statement (**Document Reference 6.1**) where necessary.

A number of mitigation measures would be applied to the Proposed Development, such as adherence to a Code of Construction Practice (CoCP) which will be a requirement of the DCO which would limit any potential impacts relating to the above, so that they are not significant.

Taking into consideration this mitigation, as well as the design of the Proposed Development, to reduce impacts as much as possible from the outset, it can be concluded that construction, operation and maintenance of the Proposed Development would not give rise to impacts which would be likely to constitute a statutory nuisance as defined by the Environmental Protection Act 1990.

## 1 Introduction

- 1.1.1 This Statement in respect of Statutory Nuisance (the "Statement") accompanies the application by Cory Environmental Holdings Limited (trading as Cory Riverside Energy) (Cory or the "Applicant") for development consent under section 37 of the Planning Act 2008 (the "PA 2008").
- 1.1.2 This Statement has been prepared pursuant to regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (the "APFP Regulations") which provides that an application for development consent must be accompanied by:
  - "a statement whether the proposal engages one or more of the matters set out in section 79(1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them".
- 1.1.3 This Statement has been prepared having regard to the requirements in Overarching National Policy Statement for Energy EN-1 paragraph 4.14.2 for consideration of possible sources of nuisance and how they might be mitigated or limited, and the *Planning Act Application Form Guidance* published by the Department for Communities and Local Government (DCLG) in June 2013.
- 1.1.4 This Statement describes the relevant nuisances defined in the Environmental Protection Act 1990, which are a result of the Proposed Development. It should be read alongside the following documents which accompany the Application:
  - a. the Environmental Statement (ES) (**Document Reference 6.1**), which reports on likely significant environmental effects during the construction, operation, maintenance, and decommissioning phases and identifies mitigation measures to avoid or minimise effects; and
  - b. the Outline Code of Construction Practice (CoCP) (**Document Reference 7.5**) through which mitigation measures identified will be applied during the construction of the Proposed Development.

#### 1.2 Environmental Protection Act 1990

- 1.2.1 Section 79(1) of the Environmental Protection Act 1990, as it applies in England and Wales, provides that each of the following matters constitutes a statutory nuisance:
  - a. any premises in such a state as to be prejudicial to health or a nuisance;

- b. smoke emitted from premises so as to be prejudicial to health or a nuisance;
- c. fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
- d. any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
- e. any accumulation or deposit which is prejudicial to health or a nuisance;
- f. any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
  - (fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;
  - (fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;
- g. noise emitted from premises so as to be prejudicial to health or a nuisance;
  - (ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street or in Scotland, road;
- h. any other matter declared by any enactment to be a statutory nuisance.
- 1.2.2 Paragraph (h) of Section 79(1) incorporates any other matter declared to be a statutory nuisance in any enactment. The Public Health Act 1936 provides that various other matters are statutory nuisances for the purposes of the Environmental Protection Act 1990. However, none of these matters are considered relevant to the Proposed Development.
- 1.2.3 An additional category of statutory nuisance has effect in London Boroughs by virtue of section 24 of the London Local Authorities Act 1996:
  - "79(1)(gb) smoke, fumes or gases emitted from any vehicle, machinery or equipment on a street so as to be prejudicial to health or a nuisance other than from any vehicle, machinery or equipment being used for fire brigade purposes."
- 1.2.4 The remaining sub-sections in Section 79 contain exceptions and definitions. The following exceptions are relevant to the Proposed Development:

- (1A) No matter shall constitute a statutory nuisance to the extent that it consists of, or is caused by, any land being in a contaminated state.
- (1B) Land is in a "contaminated state" for the purposes of subsection (1A) above if, and only if, it is in such a condition, by reason of substances in, on or under the land, that—
- (a) harm is being caused or there is a possibility of harm being caused; or
- (b) pollution of controlled waters is being, or is likely to be, caused;
- and in this subsection "harm", "pollution of controlled waters" and "substance" have the same meaning as in Part IIA of this Act.
- 1.2.5 Subsection 1(b) (smoke emitted from premises) does not apply in relation to dark smoke emitted from a chimney of a building or a chimney serving the furnace of a boiler or industrial plant attached to a building or for the time being fixed to or installed on any land (s. 79(3)).
- 1.2.6 Subsection 1(c) (fumes or gases emitted from premises) does not apply in relation to premises other than private dwellings (s. 79(4)).
- 1.2.7 Subsection 1(ga) (noise caused by a vehicle, machinery or equipment in a street) does not apply to noise made by, amongst other matters, traffic (s. 79(6A)).
- 1.2.8 The definitions that are therefore relevant to the Proposed Development are:
  - a. "Chimney" includes structures and openings of any kind from or through which smoke may be emitted;
  - b. "dust" does not include dust emitted from a chimney as an ingredient of smoke;
  - c. "fumes" means any airborne solid matter smaller than dust;
  - d. "gas" includes vapour and moisture precipitated from vapour;
  - e. "industrial, trade or business premises" means premises used for any industrial, trade or business purposes or premises not so used on which matter is burnt in connection with any industrial, trade or business process, and premises are used for industrial purposes where they are used for the purposes of any treatment or process as well as where they are used for the purposes of manufacturing;
  - f. "noise" includes vibration;
  - g. "prejudicial to health" means injurious, or likely to cause injury, to health:

- h. "premises" includes land and ... any vessel;
- i. "private dwelling" means any building, or part of a building, used or intended to be used, as a dwelling;
- j. "road" has the same meaning as in Part IV of the New Roads and Street Works Act 1991;
- k. "smoke" includes soot, ash, grit and gritty particles emitted in smoke; and
- I. "street" means a highway and any other road, footway, square or court that is for the time being open to the public.

#### 1.3 The Proposed Development

- 1.3.1 The Applicant is applying to the Secretary of State under the PA 2008 for powers to construct, operate and maintain an integrated Energy Park, to be known as Riverside Energy Park (REP). The Proposed Development comprises complementary energy generating development together with an associated Electrical Connection (together referred to as the 'Proposed Development'). As REP will be in excess of 50 MWe capacity it is classified as a Nationally Significant Infrastructure Project (NSIP) under section 14 of the PA 2008 and therefore requires a Development Consent Order (DCO) to authorise its construction and operation.
- 1.3.2 The two principal elements of the Proposed Development are: the Energy Park which would be located adjacent to an existing Energy Recovery Facility operated by the Applicant (referred to as Riverside Resource Recovery Facility (RRRF)) situated in Belvedere in the London Borough of Bexley (LBB); and the proposed underground Electrical Connection which would run from REP and terminate at the Littlebrook substation in Dartford.
- 1.3.3 A full glossary of defined terms and abbreviations is presented in the Project Glossary (**Document Reference 1.6**).

## 2 Matters Potentially Engaged

#### 2.1 Introduction

- 2.1.1 The following matters set out in section 79(1) of the Environmental Protection Act 1990 are potentially engaged by the Proposed Development:
  - a. Air quality impacts that could engage paragraph (d) of section 79(1)<sup>1</sup>;
  - b. Noise impacts which could engage paragraphs (g) and (ga) of section 79(1); and
  - c. Impacts from artificial light which could engage paragraph (fb) of section 79(1).
- 2.1.2 Each of these impacts are discussed further below.
- 2.1.3 To the extent that any potential impacts could engage any of the matters set out in Section 79(1) of the Environmental Protection Act 1990, proposed mitigation measures to limit such impacts are also described. This section has been prepared with reference to the Environmental Statement (ES) (Document Reference 6.1) and the Outline Code of Construction Practice (CoCP) (Document Reference 7.5) which have been prepared to accompany the DCO application.
- 2.1.4 The following matters listed in section 79(1) are not considered to be engaged by the Proposed Development:
  - a. any premises in such a state as to be prejudicial to health or a nuisance (s. 79(1)(a));
  - b. any animal kept in such a place or manner as to be prejudicial to health or nuisance (s. 79(1)(f)); and
  - c. any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance (s. 79(1)(fa)).

#### 2.2 Section 79(1)(d) - Air Quality

#### **Construction phase**

2.2.1 Construction activities can result in temporary effects from dust. "Dust" is a generic term which usually refers to particulate matter in the size range 1-75 microns in diameter; the most common impacts from dust emissions are soiling and increased ambient PM<sub>10</sub> concentrations (Control of Dust

<sup>&</sup>lt;sup>1</sup> The Proposed Development would not emit smoke or cause accumulation of deposits and so would not engage section 79 1 (b) or (e). (c) only applies to residential dwellings and so is not engaged by the Proposed Development.

- from Construction and Demolition Activities Building Research Establishment, 2003).
- 2.2.2 The distances from the emission source at which significant construction dust effects are likely to occur are dependent on the extent and nature of mitigation measures, the prevailing wind conditions, rainfall and the presence of natural screening by, for example, vegetation or existing physical screening. However, research indicates that effects from construction activities that generate dust are generally limited to within 150-200 m of the construction site boundary (Highways Agency, 2007), although guidance issued by the Institute of Air Quality Management (IAQM) requires consideration of effects up to 350 m from the construction area boundary (IAQM, 2011).
- 2.2.3 The construction work for the Proposed Development would require the use of a range of site plant, such as excavators and piling equipment. All plant will have an energy demand and some may result in direct emissions to air from exhausts. The key effects during the construction phase are associated with dust-raising activities related to earthworks, construction and vehicles tracking. This includes the handling of spoil, loading and unloading of trucks and the movement of the trucks around the construction site. Other effects during construction are from NO<sub>2</sub> emissions resulting from construction traffic.
- 2.2.4 Given that there are potential receptors within the range of dust impacts, a qualitative assessment of the impact of dust on the surrounding environment has been undertaken as part of the Environmental Impact Assessment (EIA) and is reported in Chapter 7 of the ES (Document Reference 6.1).
- 2.2.5 The assessment has concluded that, based on the IAQM criteria and providing embedded mitigation is followed, the risk of dust impacts to any receptors is low and therefore **not significant**.

#### **Mitigation**

- 2.2.6 The embedded mitigation measures to be applied during construction of the Proposed Development to limit the impacts of dust are as follows:
  - Wheel washing, damping down of stockpiles during dry and windy conditions, and sheeting materials to prevent dust migration; and
  - 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 Contractor(s) and site manager(s) to ensure, through the CoCP (Document Reference 7.5), that sufficient precautionary measures to limit dust generation are undertaken.

- 2.2.7 Additionally, standard mitigation measures for low risk sites, taken from the IAQM document 'Dust and Air Emissions Mitigation Measures' tables would also be applied. These are:
  - Record all dust and air quality complaints, seek to 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.

#### **Operational phase**

- 2.2.8 During operation REP will have potential implications for local air quality principally from the flue gases emitted through the combustion processes from the Energy Recovery Facility (ERF) and Anaerobic Digestion facility.
- 2.2.9 There is also the potential for odour arising from the operation of REP connected with the delivery and storage of fuel.
- 2.2.10 **Chapter 7** of the ES (**Document Reference 6.1**) presents a full numerical modelling assessment of emissions from both the ERF and Anaerobic Digestion facility using the industry recognised ADMS 5 model.
- 2.2.11 The ADMS 5 model calculates time averaged ground level concentrations over any set of distances from the source.
- 2.2.12 The numerical modelling found that none of the predicted maximum ground level concentrations exceed the assessment levels and the resultant significance of effects were either **Negligible** or **Minor adverse** in all cases.
- 2.2.13 The impact of odour during the operational phase has been considered qualitatively for a study area within the immediate vicinity of the REP site.
- 2.2.14 Waste will be delivered in closed ISO containers, sheeted in bulk container vehicles or enclosed refuse collections vehicles. Furthermore, all delivery of waste would take place within the waste reception halls as for RRRF which is operated under negative pressure, with an inflow of air but no outflow of air. In addition, air from within the bunker area is used as combustion air, with odorous compounds being burnt. Therefore, the potential for odour impacts is considered to be **Not Significant**.

#### Conclusion

2.2.15 Taking into consideration the above, and the mitigation measures secured, it can be concluded that construction and operation of the Proposed Development would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(d) of the Environmental Protection Act 1990.

#### 2.3 Section 79(1)(fb) – Artificial Light

2.3.1 During construction there may be a requirement to light site compounds and construction areas at some times of the day, based on a standard working day which in winter will include some hours of dusk or darkness. Operation of the Proposed Development would require lighting to allow safe working conditions at any time of day or night as REP would be operational for 24 hours a day.

#### **Construction Phase**

- 2.3.2 To ensure the lighting during the construction phase is appropriately managed a number of measures to avoid the creation of nuisances have been incorporated into section 3.11 of the Outline CoCP (**Document reference 7.5**). These include:
- 2.3.3 The Contractor will follow guidance relevant to lighting, including:
  - Institution of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light, (2011);
  - The Department for Communities and Local Government (DCLG) Guidance on Lighting in the Countryside: Towards Good Practice (1997); and
  - Assessment of the Problem of Light Pollution from Security and Decorative Light produced by Temple and NEP Lighting Consultancy on behalf of Defra, (2006).
- 2.3.4 The general design objectives that will be used, where practicable, to ensure that potential adverse effects of lighting associated with construction of the Proposed Development are minimised are listed below and included in the CoCP (**Document reference 7.5**):
  - 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 Application 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.
- 2.3.5 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.

#### **Operation**

- 2.3.6 An outline lighting strategy has been prepared to support the DCO Application (**Appendix K.3** of the Environmental Statement Appendices (**Document Reference 6.3**)). The outline lighting strategy deals with limiting the potential for obtrusive light from REP during the operational phase and establishes design objectives for the lighting design to minimise the effects of obtrusive light to within guideline levels.
- 2.3.7 The outline lighting strategy recommends a number of design principles to limit obtrusive light including the following:
  - Intelligently designed low-glare fully shielded fittings pointing downwards will be used;
  - Blue light emissions will be mitigated by using low colour temperature lighting;
  - Subject to meeting the operational and safety requirements, lighting will be designed to reduce the brightness and spread of light during operation;
  - The lighting design will mitigate light spill within the Crossness Nature Reserve and be designed to maximise dark areas for wildlife:
  - The lighting design will be determined by operational requirements for both day-time and night-time lighting of buildings and external areas whilst mitigating impacts on local ecology;

- The lighting design will provide adequate lighting levels to enable the safe operation of all facilities on-site and support vehicular, pedestrian and cyclist movements;
- The lighting design will be as low as guidelines allow;
- The lighting design will deliver robust and efficient lighting which creates an attractive and safe environment for staff and visitors;
- The height and design of lighting columns will considered to avoid light spill where possible;
- Lighting elements will be consistent in terms of materials, finish and colours and contribute to the appearance of REP;
- All luminaries will be of an energy efficient design and comply with the relevant British Standard; and
- Ease and safe maintenance will be considered as part of selection of light fittings and luminaries.
- 2.3.8 It is envisaged that providing these principles are followed, there is not anticipated to be significant levels of obtrusive light generated by REP during operation.

#### Conclusion

2.3.9 It is considered that with the application of embedded mitigation measures and appropriate design principles, construction and operation of the Proposed Development would not give rise to impacts which would be likely to constitute a statutory nuisance under section79(1)(fb) of the Environmental Protection Act 1990.

#### 2.4 Section 79(1)(g) and Section 79(1)(ga) – Noise

- 2.4.1 The Proposed Development has the potential to affect noise and vibration levels at the nearest noise sensitive receptors due to the construction activities associated with REP and Electrical Connection (e.g. excavation for foundations and laying of electrical cables), and the operation of REP (e.g. from normal operation of the ERF, cooling equipment and stack).
- 2.4.2 Noise impacts due to operational traffic and construction traffic would not constitute a statutory nuisance for the purposes of the Environmental Protection Act 1990 (see section 79(6A)).

#### Construction

2.4.3 A construction noise assessment has been undertaken using guidance set out in BS 5228 'Noise and vibration control on construction and open sites' and is set out in **Chapter 8** of the ES (**Document Reference 6.1**).

- 2.4.4 The assessment has been based upon a conservative worst case assumption of the construction plant all being used simultaneously.
- 2.4.5 The assessment concluded that at distances of 500 m from the REP site, noise levels from construction are likely to be 56 dB LAeq,1hour. This is below the proposed Lowest Observable Effects Level (LOAEL) and therefore equates to a negligible effect. The nearest dwellings to REP are over 500 m from the REP site, based upon this assessment the effect on these receptors is therefore assessed as **Negligible**.

#### Mitigation

- 2.4.6 Nevertheless, to ensure that noise during the construction stages is appropriately managed, a number of measures to avoid the creation of nuisances have been incorporated into section 5.4 of the Outline CoCP (Document reference 7.5). These include:
  - 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;
  - Core hours for potentially noisy or disturbing construction works of 7am to 7pm Mondays to Fridays, 7am to 1pm on Saturdays with no works on Sundays/Public Holidays. This would not preclude work: carried out within existing buildings or buildings constructed as part of the authorised development; carried out with the prior approval of the relevant planning authority; are associated with an emergency; or, are associated with slip form working or work to the Electrical Connection;
  - Ensure the use of quiet working methods and the most suitable plant (where reasonably practicable);
  - Screening fixed and mobile plant to reduce noise which cannot be reduced by increasing the distance between the source and the receiver (i.e. by installing acoustic screens/enclosures);
  - Where practicable, orienting fixed and mobile plant that is known to emit noise strongly in one direction so that the noise is directed away from dwellings or sensitive receptors;
  - Closing acoustic covers to engines when they are in use or idling; and
  - Engage with local neighbours and residents through the agreed Community Liaison channels to keep them informed of the proposed working schedule, where appropriate, including the times and duration of any abnormally noisy activity that may cause concern.

#### **Operation**

- 2.4.7 An operational noise assessment has been undertaken using guidance set out in BS 4142 (2014) 'Method for rating industrial noise affecting mixed residential and industrial areas' and is also set out in **Chapter 8** of the ES (**Document Reference 6.1**).
- 2.4.8 The nearest Noise Sensitive Receptors (NSRs) used in the operational assessment are Hackney House, Jutland House and dwellings at St. Thomas Road.
- 2.4.9 In considering the results of the numerical assessment, noise emission levels from REP are likely to be at least 5 dB below the background sound levels during the day time and night-time which equates to the no observable effects level (NOEL). Based upon this, the effects are considered to be **Negligible**.

#### Conclusion

2.4.10 Taking into consideration the above, it can be concluded that construction and operation of the Proposed Development would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(g) or section 79(1)(ga) of the Environmental Protection Act 1990.

## 3 Conclusion

#### 3.1 Summary

- 3.1.1 This Statement has been prepared in accordance with regulation 5(2)(f) of the AFFP Regulations, which requires any DCO application to be accompanied by a statement considering whether the proposal would engage one or more of the statutory nuisances set out in Section 79(1) of the Environmental Protection Act 1990.
- 3.1.2 Detailed assessments have been undertaken to assess: potential air quality impacts, noise levels, and artificial lighting generated by the Proposed Development during construction and operation.
- 3.1.3 In all cases, the application of secured mitigation measures is expected to avoid any impacts giving rise to a statutory nuisance under section 79(1) of the Environment Protection Act 1990.