

## Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

# The Port Talbot Steelworks (Power Generation Enhancement) Order

## 5.02 Statement in respect of Statutory Nuisance

**PINS** Reference

EN010062

**Document No.** 

5.02

Regulation

5(2)(f)

**Author** 

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Revision	Date	Description
0	July 2014	Submission Version

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## **Abbreviations & Glossary**

AQS Air Quality Standard

BS4142 British Standard – Method for Rating Industrial Noise Affecting Mixed

Residential and Industrial Areas

BS5228 British Standard – Code of Practice for Noise and Vibration Control on

Construction and Open Sites

BS6472 British Standard – Guide to Evaluation of Human Exposure to Vibration in

**Buildings** 

CAA Civil Aviation Authority

CadnaA Noise modelling software package

CoCP Code of Construction Practice (Document 8.06)

DCO Development Consent Order

DMP Dust Management Plan

ES Environmental Statement

MWe Mega Watt electrical

NMP Noise Management Plan

NO<sub>2</sub> Nitrogen Dioxide

NOx Nitrogen Oxide

NPTCBC Neath Port Talbot County Borough Council

NRW Natural Resources Wales (formally EAW and CCW)

NSIP Nationally Significant Infrastructure Project

Tata Steel UK Limited The Applicant





### **EXECUTIVE SUMMARY**

- 1.1.1 This report has been produced for the purpose of identifying the matters set out in section 79(1) of the Environmental Protection Act 1990 in respect of statutory nuisances and considers whether the proposed development would engage one or more of those matters. Where any of those matters may be potentially engaged, the Statement sets out the proposals for mitigating or limiting them.
- 1.1.2 This statement concludes that the only matters comprised in section 79(1) of the 1990 Act which may, potentially, be engaged as a consequence of the proposed development are dust, noise and light.
- 1.1.3 This statement concludes that, with the mitigation and control measures proposed in the Environmental Statement (ES) which will be captured within and implemented by the Code of Construction Practice (CoCP) (Volume 3, Appendix 15.1) and its associated management plans, it is not anticipated that a statutory nuisance will result from the construction or operation of the proposed development.





## 1 INTRODUCTION

#### 1.1 Introduction

- 1.1.1 This Statement in Respect of Statutory Nuisance ("the Statement") accompanies an application by Tata Steel UK Limited ("the Applicant") for development consent under section 37 of the Planning Act 2008.
- 1.1.2 The project for which development consent is being sought ("the proposed development") comprises a power generating station and 66kv electrical connection cables which are connected to the two existing onsite substations. The generating capacity of the proposed development exceeds 50 megawatts (MWe), and it is therefore designated as a Nationally Significant Infrastructure Project ("NSIP") under the Planning Act 2008.
- 1.1.3 This Statement has been prepared pursuant to regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. In accordance with that regulation, it indentifies whether the proposed development engages one or more of the matters listed as statutory nuisances in section 79(1) of the Environmental protection Act 1990 and, if so, how the Applicant proposes to mitigate or limit those effects.
- 1.1.4 This Statement has been prepared having regard to the Planning Act Application Form Guidance published by the Department for Communities and Local Government in June 2013.
- 1.1.5 Where relevant, this Statement refers to the Environmental Statement (ES) (Document 6.02, Volume 2) and the Code of Construction Practice (CoCP) (Appendix 15.1).





### 2 STATUTORY CONTEXT

#### 2.1 The Requirement for this Statement

- 2.1.1 Section 37(3)(d) of the Planning Act 2008 requires applications for development consent to be accompanied by documents and information of a prescribed description.
- 2.1.2 The documents and information are prescribed by the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. Regulation 5(2)(f) provides that an application 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 therefore) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them".

#### 2.2 Categories of statutory nuisance

- 2.2.1 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.
- 2.2.2 Paragraph (h) of Section 79(1) incorporates any statutory nuisances contained in other legislation. 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.
- 2.2.3 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)
     if, and only if, it is in such a condition, by reason of substances in, on or under the land, that
    - Harm is being caused or there is a possibility of harm being caused; or
    - Pollution of controlled waters is being or is likely to be, caused; (In this subsection "harm", "pollution of controlled waters" and





"substance" have the same meaning as in Part IIA of the Environmental Protection Act 1990).

- 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.
- subsection 1(c) (fumes or gases emitted from premises) does not apply in relation to premises other than private dwellings (s. 79(4)); and
- 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)).
- The definitions that are relevant to the proposed development are:
- "Chimney" includes structures and openings of any kind from or through which smoke may be emitted;
- "dust" does not include dust emitted from a chimney as an ingredient of smoke;
- "fumes" means any airborne solid matter smaller than dust;
- "gas" includes vapour and moisture precipitated from vapour;
- "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;
- "noise" includes vibration;
- "prejudicial to health" means injurious, or likely to cause injury, to health;
- "premises" includes land and ... any vessel;
- "private dwelling" means any building, or part of a building, used or intended to be used, as a dwelling;





- "road" has the same meaning as in Part IV of the New Roads and Street Works Act 1991;
- "smoke" includes soot, ash, grit and gritty particles emitted in smoke; and
- "street" means a highway and any other road, footway, square or court that is for the time being open to the public.





## 3 ASSESSMENT OF MATTERS POTENTIALLY ENGAGED

#### 3.1 Introduction

- 3.1.1 The following matters set out in section 79(1) of the Environment Protection Act 1990 are potentially engaged by the proposed development:
  - Air quality impacts that could engage paragraphs (c) (d) and (e) of section 79(1);
  - Noise impacts which could engage paragraphs (g) and (ga) of section 79(1).
  - Impacts from artificial light which could engage paragraph (fb) of section 79(1).
- 3.1.2 Each of these impacts is discussed below.

#### 3.2 Air Quality (Section 79(1)(c, d and e))

Construction phase

- 3.2.1 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 (Building Research Establishment, 2003).
- 3.2.2 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 150-200m of the construction site boundary (Highways Agency, 2007), although guidance issued by the Institute of Air Quality Management requires





- consideration of effects up to 350m from the construction area boundary (Institute of Air Quality Management, 2011).
- 3.2.3 The construction work for the proposed development requires the use of a range of site plant, such as excavators and piling equipment. All of these plant 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.
- 3.2.4 ES Volume 2, Chapter 5 Air Quality, Sections 5.6.1 5.6.16 details the assessment of construction phase activities. There are up to 100 sensitive receptors located within 350m of the Order Limits and / or within 100 metres of the construction traffic routes on the local road network (up to 500 metres from site entrances). These receptors are all residential dwellings.
- 3.2.5 The significance of construction-phase dust effects is assessed as low to medium risk for construction activities on dust receptors in line with IAQM methodology risk categories and of medium risk for dust emissions from construction vehicles, if unmitigated. The significance of construction-phase NO<sub>2</sub> effects from construction traffic is assessed as negligible at all receptor locations (Table 5.47 within ES Chapter 5 Air Quality).

#### <u>Mitigation</u>

- 3.2.6 The proposed development has incorporated mitigation measures for the construction phase which are principally aimed at reducing dust effects from the construction activities and are included in the outline CoCP and associated Dust Management Plan (DMP).
- 3.2.7 In addition, the Applicant is aware of previous concerns from the public who live in close proximity of the Port Talbot site regarding emissions and dust. This mainly stemmed from other site activities, which have now ceased, and also the construction of Harbour Way, which the Applicant was not involved in. The Applicant is proposing to incorporate the existing Port





- Talbot dust management "traffic light system" which is implemented on a daily basis and will be incorporated in to the DMP.
- 3.2.8 The construction phase will include the mitigation measures presented in Volume 2, Chapter 5 Air Quality of the ES which will reduce the dust risk from each of the sources assessed. The overall significance of effects from construction dust has been determined taking this mitigation into account.

#### Conclusion

3.2.9 Taking into account the mitigation measures described above, the air quality impacts arising during the construction phase are not predicted to cause a nuisance or to be prejudicial to health.

#### Operational phase

- 3.2.10 Air quality effects for the operational phase are associated with the emissions of gases from the proposed boiler stacks.
- 3.2.11 ES Volume 2, Chapter 5 Air Quality, Sections 5.6.31 5.6.67 details the assessment of operational phase activities. Sensitive receptors were selected where the public is regularly present and likely to be exposed over the averaging period of the objective .i.e. where both annual and short-term objectives are applicable at locations where receptors are likely to be present for an extended time period such as residential dwellings, schools and hospitals while only short-term objectives apply at locations where sensitive receptors are present for only short time periods such as shopping areas, car parks, bus/rail stations etc. Dispersion modelling predicted ground level concentrations across nested Cartesian receptor grids. Additionally, a number of discrete receptors were modeled to illustrate predicted concentrations at sensitive receptors located close to the site. There are 33 discrete human receptors included in the dispersion modeling.
- 3.2.12 In relation to construction scenario Option 1, Table 5.54 shows that, when operating at the estimated emission limits, the annual mean concentrations of NO<sub>2</sub>, PM<sub>10</sub>/PM<sub>2.5</sub> and SO<sub>2</sub> increase at a number of receptor locations. However, only annual NO<sub>2</sub> concentrations are predicted to increase by more than 1% of the AQS objective. The largest





increase occurs at Groeswen Park (Receptor 4) where the maximum increase in annual NO 2 is predicted to be  $0.6 \,\mu\text{g/m}^3$ , or 1.5% of the AQS objective. When this is added to the existing background concentrations recorded at the Port Talbot Fire Station automatic monitor, which will already include contributions from the existing boilers on the application site, the predicted environmental concentration would be  $18.6 \,\mu\text{g/m}^3$ , or 46.5% of the AQS objective so well below the 70% screening level set out in H1 Assessment Methodology.

- 3.2.13 In relation to Option 2, Tables 5.57 to 5.59 show that, when operating at the maximum ELV, the long-term process contribution of NO<sub>2</sub> and PM<sub>10</sub> /PM<sub>2.5</sub> are generally slightly higher or the same at every receptor for the first installation than for the existing configuration. All of the increases for PM are less than 1% of the AQS objective and as such can be screened out as not significant based on the H1 screening methodology. One receptor (Receptor 4) is predicted to have an increase of more than 1% for NO<sub>2</sub> (Receptor 4 with an increase of 1.1% for NO<sub>2</sub>). Receptor 4 is predicted to have an environmental concentration of 22.6 μg/m3 for NO<sub>2</sub> (57% of the AQS) which remains within the Air Quality Standards. As such, contributions from the site are not anticipated to lead to a significant change in ground level concentrations.
- 3.2.14 In the case of PM<sub>10</sub> and NO<sub>2</sub> based on the ELV with Option 2 Phase 1, the maximum increase in short-term process contributions is less than 10% of the AQS objective at all receptors and as such can be screened out as insignificant based on the H1 screening methodology.

#### Mitigation

3.2.15 Predicted concentrations of pollutants from the operational phase of the proposed development have been demonstrated by the assessment, in ES Volume 2 Chapter 5 Air Quality, to meet all relevant air quality standards and objectives. Therefore, no further mitigation is required beyond that incorporated into the design of the proposed development.

#### Conclusion





3.2.16 Taking into account the assessment of air quality effects outlined above, the effects during the operational phase are not predicted to cause a nuisance or be prejudicial to health.

#### 3.3 Artificial Light (section 79(1)(fb))

- 3.3.1 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.
- 3.3.2 Lighting will be managed through the measures provided in the CoCP, which are as outlined below.
- 3.3.3 Lighting will be sited so as to minimise visual intrusion to users of Harbour Way and nearby residential dwellings, whilst maintaining the safe and efficient operation of the construction site. The position and luxe levels of any lighting will be positioned and directed to minimise nuisance to residents, walkers and vehicle drivers. Implementation will comply with the Institute of Lighting Engineers Guidance Notes for the Reduction of Obtrusive Light (2005) so far as it is reasonably practicable and applicable to construction works.
- 3.3.4 During operation of the proposed development ancillary and security lighting will be provided on the main buildings and in the small car park area. A lighting scheme will be provided to NPTCBC for approval through a Requirement of the DCO.
- 3.3.5 The Civil Aviation Authority (CAA) has provided guidance that aviation lighting may be required for the stacks in line with CPA 764 if the stacks are over 80m in height, and also for cranes during construction.

#### Conclusion

3.3.6 Taking into account the management of lighting outlined above and in the CoCP, it is considered the impacts from artificial lighting arising during both the construction and the operational phase will not cause a nuisance or be prejudicial to health.





#### 3.4 Noise (Section 79(1)(g) and (ga))

- 3.4.1 This section addresses the potential of noise during construction activities. Noise impacts due to operational traffic and construction traffic would not constitute a statutory nuisance for the purposes of the Environmental Protection Act (see section 79(6A)).
- 3.4.2 Construction noise will be controlled through the implementation of a Noise Management Plan with full consideration of BS 5228; provisions for noise mitigation measures and on-site management of noise issues shall be documented in the Code of Construction Practice (CoCP). The application of Best Practicable Means (BPM) as defined under Section 72 of the Control of Pollution Act (CoPA) 1974 shall be implemented.
- 3.4.3 Noise from the operation of the proposed development will be mitigated through design. In order to satisfy the requirements of the Environmental Permit, operational noise levels from the proposed development will be controlled using Best Available Techniques (BAT) in order to achieve appropriate operational noise limits, such that any adverse effects are avoided and operational noise effects are of negligible significance.

#### Conclusion

3.4.4 Taking into account the mitigation measures outlined above, it is considered the impacts from noise during both the construction and the operational phase will not cause a nuisance or be prejudicial to health.





### 4 CONCLUSION

- 4.1.1 This Statement identifies whether the matters in respect of statutory nuisance set out in section 79(1) of the Environmental Protection Act 1990 would be engaged by the proposed development. Where such matters would be engaged, the Statement sets out how it is proposed to mitigate or limit the nuisance caused.
- 4.1.2 The Statement concludes that the following matters set out in section 79(1) could potentially be engaged by the proposed development:
  - (d) Air quality impacts that could engage paragraphs (c) (d) and (e) of section 79(1);
  - Noise impacts which could engage paragraphs (g) and (ga) of section 79(1).
  - Impacts from artificial light which could engage paragraph (fb) of section 79(1).
- 4.1.3 For all of the above matters, the Statement concludes that, with the implementation of mitigation and control measures included in the ES, including the Code of Construction Practice (Document 8.06) and other measures as set out in ES Appendix 5 (Schedule of Mitigation) the proposed development would not give rise to a nuisance or be prejudicial to health..





## 5 REFERENCES

The National Archives. Environmental Protection Act 1990. Online at: <a href="http://www.legislation.gov.uk/ukpga/1990/43/section/79">http://www.legislation.gov.uk/ukpga/1990/43/section/79</a> (Accessed 23rd April 2014).

The Control of Dust from Construction and Demolition Activities, BRE, 2003



