

## LOCAL MEMBER OBJECTION & PETITION

COMMITTEE DATE: 15/03/2017

APPLICATION No. **16/02256/MJR** APPLICATION DATE: 23/09/2016

ED: **SPLOTT**

APP: TYPE: Variation of Conditions

APPLICANT: Viridor Waste Management Limited  
LOCATION: CARDIFF ENERGY RECOVERY FACILITY,  
TRIDENT INDUSTRIAL PARK, GLASS AVENUE, SPLOTT  
PROPOSAL: VARIATION OF CONDITION 22 OF 10/00149/E  
SO THAT THE ENERGY RECOVERY FACILITY SHALL NOT  
TREAT IN EXCESS OF 425,000 TONNES OF RESIDUAL  
WASTE PER ANNUM

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**RECOMMENDATION 1:** That, having taken the environmental information into consideration, and subject to the completion of a deed of variation to the Section 106 Agreement, permission be **GRANTED** for the erection of an energy from waste facility to include combined heat and power plant, pre-treatment/recycling facility, incinerator bottom ash recycling and ancillary offices at Trident Park, Glass Avenue, off Ocean Way, Cardiff without complying with Condition 22 but subject to the following conditions:

1. The energy from waste facility hereby approved shall not treat in excess of 425,000 tonnes of residual waste per annum. Reason: The development has been assessed on this basis.
2. The waste processed within the approved energy from waste facility shall at all times be non-hazardous. Reason: In the interests of safety.
3. Within 3 months of the date of this permission a final report demonstrating that all long-term site remediation criteria have been met and documenting the decision to cease monitoring shall be submitted to and approved in writing by the Local Planning Authority. Reason: To prevent pollution of the water environment and to ensure that the safety of future occupiers is protected.
4. Prior to being discharged into any watercourse, surface water sewer or soakaway system, all surface water drainage from parking areas and hardstandings shall be passed through an oil interceptor designed and constructed to have a capacity and details compatible with the site being drained. Roof water shall not pass through the interceptor. Reason: To prevent pollution of the water environment.

## 1. **DESCRIPTION OF PROPOSED DEVELOPMENT**

- 1.1 Permission is sought to vary Condition 22 of planning permission no. 10/00149/E to allow up to 425,000 tonnes of residual waste per annum to be treated at Cardiff Energy Recovery Facility, Trident Park.
- 1.2 A separate application (ref: 16/02384/MJR), also presented to this Committee, seeks permission to modify the Section 106 Agreement that accompanies the existing planning permission to remove the catchment area restriction that currently limits inputs into the facility to waste from the South East Wales Region.
- 1.3 The applicant advises that Trident Park has been operational for two years and is currently the only operational ERF in Wales. The plant is diverting 350,000 tonnes of waste from landfill and generating substantial low carbon/renewable energy which is exported for use in the National Grid. Because of improved plant availability and the waste fuel having a lower energy content than originally assumed the facility has the capability of processing more waste fuel than is currently allowed by the planning permission. Condition 22 of planning permission no. 10/00149/E currently restricts the amount of waste that can be processed by the facility:

*22. The energy recovery facility hereby approved shall not treat in excess of 350,000 tonnes of residual waste per annum. Reason: The proposed development has been considered on the above basis.*

- 1.4 The original plant design assumed incoming waste would have a calorific value (CV) of just over 10 MJ/kg and that the Energy Recycling Facility (ERF) would be available for 87% of the year. These assumptions gave rise to the annual throughput of 350,000t per year of waste fuel being required to maintain the energy output of the plant at 30MW. Now that the ERF has been operational the applicant considers that an availability of 95% is deliverable and experience is showing that the CV of the waste is closer to 9 MJ/kg than 10 MJ/kg. The lower the average CV of the waste means that more waste is required to maintain the energy output of the plant. Based on a waste CV of 9 MJ/kg and the currently approved tonnage of 350,000t per year, the ERF can only maintain its design energy output of 30MW for 285 days in the year (78% availability).
- 1.5 By allowing additional waste to be processed, the ERF plant would have the flexibility to respond to changes in CV and maintain its energy output of 30MW for approximately 347 days of the year (95% availability). Based on the worst case CV of 9 MJ/kg, in order for the plant to maintain the energy output it has been designed for (30MW), it is necessary for it to process an additional 75,000t of waste per year, which equates to a revised total throughput of 425,000t of waste per year.
- 1.6 The additional 75,000 tonnes per annum of waste would be imported in 20 tonne bulk loads and would result in an additional 13 HGVs (26 movements) a day. Increased outputs of by-products such as air pollution control residues, bottom ash and metals would result in an additional 4 HGVs a day (8

movements). The total additional new movements as a result of the proposed development would therefore be an average of 17 HGVs a day (34 movements). Such additional trip generation would lead to an average of 1 to 2 extra HGVs (3 to 4 movements) per hour.

- 1.7 The applicant advises that the need for such a variation because of improved plant availability and/or lower than assumed CVs is not unique to Trident Park. They advise that similar schemes have been considered and approved for other operators around the UK. In all cases the circumstances were the same as at Trident Park in that experience of actually operating the ERF has enabled the original assumptions on plant availability and/or waste CV to be reviewed using actual operating data.
- 1.8 No changes to the existing ERF building or stack height are proposed.
- 1.9 No change to existing employment levels is required to implement the proposed changes.
- 1.10 The plant would continue to operate on a continuous basis, 24 hours a day, 7 days a week throughout the year. Twice a year the plant is subject to periods of programmed maintenance delivering an annual availability of 95% (347 days of the year). The majority of vehicles handling waste and other material associated with the ERF would continue to enter and exit the site Monday to Sunday 07:00 – 17:00 although the majority of the waste will be delivered during weekdays.
- 1.11 A formal scoping exercise has been undertaken. A request for a scoping opinion was submitted to Cardiff Council in June 2016 to focus the EIA. This request was accompanied by an appraisal of the likely significant environmental effects. Cardiff Council issued its formal scoping opinion in July 2016 which confirmed that the proposed changes may have significant environmental effects on the following and which would require assessment:
  - (i) Traffic;
  - (ii) Air Quality;
  - (iii) Noise;
  - (iv) Ecology; and
  - (v) Climate Change
- 1.12 Consequently, the application is accompanied by an Environmental Statement (ES) setting out the results of an Environmental Impact Assessment (EIA) which has been undertaken to consider the environmental effects of the proposed development and measures which are available to minimise the identified effects.
- 1.13 Effects that were not considered to be significant, because there would be no change to the existing ERF building, are as follows:
  - (i) Geology and Soils;
  - (ii) Water;

- (iii) Landscape and Visual; and
- (iv) Cultural Heritage.

- 1.14 The conclusions of the Environmental Statement (attached to this report) found that, in respect of traffic, air quality, noise and ecology, no significant adverse effects on the environment were identified and in respect of climate change, significant environmental benefits were identified.
- 1.15 Further information in the form of an 'in-combination' assessment as part of the Habitats Regulations Assessment has been submitted by the applicant, following a request by the Local Planning Authority. No projects or plans identified were considered to present a risk of significant in-combination effects due to emissions to air on the Severn Estuary SPA/SAC.
- 1.16 The application is also accompanied by a Waste Planning Assessment (WPA) as required under paragraph 4.2 of TAN 21: Waste.

## 2. **DESCRIPTION OF SITE**

- 2.1 The application site comprises approximately 4.5 hectares and is located within an area of high density industrial and commercial uses. In the immediate area the land uses are characterised by:
- (i) South – Port of Cardiff, including Roath Dock and various industrial railway lines;
  - (ii) North – Mixed Use commercial and retail developments associated with Ocean Way and further north by the residential areas of Atlantic Wharf and Splott. Approximately 100 flats in blocks up to 6 storeys are located approximately 600 metres north on Lewis Road;
  - (iii) East – Industrial uses associated with Portmanmoor Industrial Estate and further to the east by Celsa steelworks and Rover Way;
  - (iv) West – Immediately to the west is Celsa Steel works, beyond which is the mixed-use area of the Cardiff Bay redevelopment area, including the residential areas of Adventurer's Quay (6 storey apartments approximately 600 metres southwest), Celestia (apartments adjacent to Adventurer's Quay apartments up to 15 storeys) and Butetown
- 4.2 Access to the site is gained from Ocean Way via Glass Avenue.
- 4.3 The Wentloog/Gwent Levels Special Landscape Area lies some 6 kilometres to the north-east of the site.
- 4.4 There are no known features of ecological interest within the site.
- 4.5 There are no statutory designated sites within the application site itself or its immediate vicinity. At its nearest point, the site lies within approximately 600m north of the Severn Estuary, which is of national and international importance due to the presence of extensive areas of intertidal habitats (eg, mudflats, sand banks, rocky platforms and saltmarsh).

- 4.6 The Flood Risk Maps associated with Technical Advice Note 15: Development and Flood Risk (TAN15) indicate that the proposed application site lies within Flood Policy Zone B. Zone B is defined as being areas that have previously been subject to flooding.

### 3. **SITE HISTORY**

- 3.1 10/00149/E: Permission granted in June 2010 for the erection of an Energy From Waste Facility to include a combine heat and power plant, pre-treatment/recycling facility, incinerator bottom ash recycling and ancillary offices.
- 3.2 08/2616/E: Permission refused in July 2009 for the erection of an energy from waste facility with combined heat and power plant and ancillary offices for the following reason:
1. *In order to operate at its design capacity, without compromising the recycling targets of the Welsh Assembly Government, the proposal would need to import substantial quantities of residual waste material from outside the administrative boundary of Cardiff Council and to export a substantial quantity of hazardous fly ash waste for disposal at an unspecified authorised disposal site in England. This would result in the unsustainable transportation of waste material contrary to the objectives of Technical Advice Note 21: Waste.*

### 4. **POLICY FRAMEWORK**

- 4.1 Towards Zero Waste (June 2010)
- 4.2 Planning Policy Wales, Edition 9 (November 2016).

*4.2.2 The planning system provides for a presumption in favour of sustainable development to ensure that social, economic and environmental issues are balanced and integrated, at the same time, by the decision-taker when...taking decisions on individual planning applications.*

*4.2.4 Legislation secures a presumption in favour of development in accordance with the development plan for the area unless material considerations indicate otherwise.*

*4.3.1 All those involved in the planning system are expected to adhere to (inter alia):*

- *putting people, and their quality of life now and in the future, at the centre of decision-making;*
- *taking a long term perspective to safeguard the interests of future generations, whilst at the same time meeting needs of people today;*
- *respect for environmental limits, so that resources are not irrecoverably depleted or the environment irreversibly damaged. This means, for example, mitigating climate change, protecting and enhancing*

*biodiversity, minimising harmful emissions, and promoting sustainable use of natural resources;*

- *tackling climate change by reducing the greenhouse gas emissions that cause climate change and ensuring that places are resilient to the consequences of climate change; and*
- *taking account of the full range of costs and benefits over the lifetime of a development, including those which cannot be easily valued in money terms when making plans and decisions and taking account of timing, risks and uncertainties. This also includes recognition of the climate a development is likely to experience over its intended lifetime.*
- *applying the precautionary principle. Cost-effective measures to prevent possibly serious environmental damage should not be postponed just because of scientific uncertainty about how serious the risk is;*
- *using scientific knowledge to aid decision-making, and trying to work out in advance what knowledge will be needed so that appropriate research can be undertaken;*
- *while preventing pollution as far as possible, ensuring that the polluter pays for damage resulting from pollution. In general the Welsh Government will seek to ensure that costs are met by those whose actions incur them;*
- *applying the proximity principle, especially in managing waste and pollution. This means solving problems locally rather than passing them on to other places or to future generations;*
- *working in collaboration with others to ensure that information and knowledge is shared to deliver outcomes with wider benefits.*

*4.4.1 The following sustainability objectives for the planning system reflect our vision for sustainable development and the outcomes we seek to deliver across Wales. These objectives should be taken into account...in taking decisions on individual planning applications in Wales. These reflect the sustainable development outcomes that we see the planning system facilitating across Wales.*

*4.4.3 Planning policies, decisions, and proposals should (inter alia):*

- *Maximise the use of renewable resources, including sustainable materials (recycled and renewable materials and those with a lower embodied energy). Where it is judged necessary to use non-renewable resources they should be used as efficiently as possible. The use of renewable resources and of sustainably produced materials from local sources should be encouraged and recycling and re-use levels arising from demolition and construction maximised and waste minimised;*
- *Encourage opportunities to reduce waste and all forms of pollution and promote good environmental management and best environmental practice. Waste arising from demolition and construction should be minimised, and opportunities to recycle and re-use this waste promoted;*
- *Promote a low carbon economy;*
- *Contribute to the protection and improvement of the environment, so as to improve the quality of life, and protect local and global ecosystems. In*

*particular, planning should seek to ensure that development does not produce irreversible harmful effects on the natural environment and support measures that allow the natural heritage to adapt to the effects of climate change. The conservation and enhancement of statutorily designated areas and of the countryside and undeveloped coast; the conservation of biodiversity, habitats, and landscapes; the conservation of the best and most versatile agricultural land; and enhancement of the urban environment all need to be promoted;*

- *Contribute to the protection and, where possible, the improvement of people's health and wellbeing as a core component of achieving the well-being goals and responding to climate change. Consideration of the possible impacts of developments – positive and/or negative – on people's health at an early stage will help to clarify the relevance of health and the extent to which it needs to be taken into account;*
- *Promote quality, lasting, environmentally-sound and flexible employment opportunities;*
- *Support the need to tackle the causes of climate change by moving towards a low carbon economy. This includes facilitating development that reduces emissions of greenhouse gases in a sustainable manner, provides for renewable and low carbon energy sources at all scales and facilitates low and zero carbon developments;*

*4.5.7 Planning to minimise the causes of climate change means taking decisive action to move towards a low carbon economy by proactively reducing the demand for energy, facilitating the delivery of new and more sustainable forms of energy provision at all scales and minimising the emissions of greenhouse gases to the atmosphere.*

*12.1.6 In general, local planning authorities should seek to maximise the use of existing infrastructure*

*12.5.1 Planning authorities should, in principle, be supportive of facilities which fit with the aspirations of [Towards Zero Waste and associated sector plans] and in doing so reflect the priority order of the waste hierarchy as far as possible.*

*12.5.3 The land use planning system has an important role to play in facilitating sustainable waste management by providing a framework for decision making which recognises the social, economic and environmental benefits that can be realised from the management of waste as a resource to meet the needs of society and businesses, whilst at the same time:*

- *minimising adverse environmental impacts and avoiding risks to human health;*
- *protecting areas of designated landscape and nature conservation from inappropriate development; and*
- *protecting the amenity of residents, of other land uses and users affected by existing or proposed waste management facilities.*

*12.5.4 the waste hierarchy provides the key starting point for all types of waste management proposals and consideration of the hierarchy should be set*

*against the wider social, economic and environmental considerations*

*12.7.2 The benefits which can be derived from proposals for waste management facilities as well as the impact of proposals on the amenity of local people and the natural and built environment must be adequately assessed to determine whether a planning application is acceptable, and, if adverse impacts on amenity or the environment cannot be mitigated, planning permission should be refused.*

*12.7.4 Planning authorities, other relevant local authority departments and Natural Resources Wales are expected to work closely together to ensure that conditions attached to planning consents and those attached to Environmental Permits are complementary and do not duplicate one another. However, local planning authorities will need to be satisfied that proposals are capable of effective regulation and Natural Resources Wales should assist in establishing this position. In certain circumstances, where proposals are complex, it will be good practice to encourage the parallel tracking of planning and environmental permitting applications.*

*12.8.6 The Welsh Government's aim is to secure an appropriate mix of energy provision for Wales which maximises benefits to our economy and communities, whilst minimising potential environmental and social impacts. This forms part of the Welsh Government's aim to secure the strongest economic development policies to underpin growth and prosperity in Wales recognising the importance of clean energy and the efficient use of natural resources, both as an economic driver and a commitment to sustainable development.*

*12.8.8 The Welsh Government is committed to using the planning system to*

- optimise renewable energy generation;*
- optimise low carbon energy generation;*
- facilitate combined heat and power systems (and combined cooling, heat and power) where feasible;*

*12.8.9 Local planning authorities should facilitate the development of all forms of renewable and low carbon energy to move towards a low carbon economy to help to tackle the causes of climate change.*

*12.8.10 At the same time, local planning authorities should...ensure that international and national statutory obligations to protect designated areas, species and habitats and the historic environment are observed*

*13.10.1 The planning system should determine whether a development is an acceptable use of land and should control other development in proximity to potential sources of pollution rather than seeking to control the processes or substances used in any particular development.*

*13.10.2 Planning authorities should operate on the basis that the relevant pollutant control regimes will be properly applied and enforced by other agencies. They should not seek to control through planning measures, matters*



*that are the proper concern of the pollution control authority. These regimes are set out in the Environment Act 1995, the Environmental Protection Act 1990, the Water Resources Act 1991 and the regulatory regimes introduced by the Pollution Prevention and Control Act 1999. Each of these may have a bearing on the environmental controls imposed on the development in respect of environmental and health concerns and planning authorities will need to ensure that planning conditions do not duplicate or contradict measures more appropriately controlled under these regimes.*

*13.12.1 The potential for pollution affecting the use of land will be a material consideration in deciding whether to grant planning permission. Material considerations in determining applications for potentially polluting development are likely to include:*

- location, taking into account such considerations as the reasons for selecting the chosen site itself;*
- impact on health and amenity;*
- the risk and impact of potential pollution from the development, insofar as this might have an effect on the use of other land and the surrounding environment (the environmental regulatory regime may well have an interest in these issues, particularly if the development would impact on an Air Quality Management Area or a SAC);*
- prevention of nuisance;*
- impact on the road and other transport networks, and in particular on traffic generation; and*
- the need, where relevant, and feasibility of restoring the land (and water resources) to standards sufficient for an appropriate after use. (Powers under the Pollution Prevention and Control Act 1999 require an operator to return a site to a satisfactory state on surrender of an Integrated Pollution Prevention and Control Permit).*

#### 4.5 Technical Advice Notes (TANs):

5 Nature Conservation and Planning  
8 Planning for Renewable Energy  
11 Noise  
18 Transport  
21 Waste

#### 4.6 Local Development Plan (January 2016):

KP1 Level of Growth  
KP6 New Infrastructure  
KP7 Planning Obligations  
KP8 Sustainable Transport  
KP12 Waste  
KP13 Responding to Evidenced Social Needs  
KP14 Healthy Living  
KP15 Climate Change  
KP18 Natural Resources  
EN3 Landscape Protection

EN5	Designated Sites
EN6	Ecological Networks and Features of Importance for Biodiversity
EN7	Priority Habitats and Species
EN9	Conservation of the Historic Environment
EN10	Water Sensitive Design
EN11	Protection of Water Resources
EN12	Renewable Energy and Low Carbon Technologies
EN13	Air, Noise, Light Pollution and Land Contamination
EN14	Flood Risk
T2	Strategic Rapid Transit and Bus Corridor Enhancement
T5	Managing Transport Impacts
T6	Impact on Transport Networks and Services
T7	Strategic Transportation Infrastructure
C3	Community Safety/Creating Safe Environments
C6	Health
W1	Sites for Waste Management Facilities

- 4.7 The following guidance documents were supplementary to the City of Cardiff Local Plan (1996), now superseded by the Local Development Plan (LDP). They remain a material consideration insofar as they are consistent with LDP policy:

*Biodiversity (2011)*

*Access, Circulation and Parking (2010)*

## 5. **INTERNAL CONSULTEE RESPONSES**

- 5.1 The **Operational Manager, Transportation**, notes that the application is supported by a Transport Assessment (TA) that analyses the traffic impact on the adjacent roundabout and concludes that it will continue to operate satisfactorily with the additional 3 to 4 HGVs per hour over the identified daily 10 hour period. He advises that the site is accessed from the strategic/primary highway network (Ocean Way and Rover Way) that connects to the trunk road network, A48 and on to the M4, and does not require the HGVs to pass directly through residential areas. While the network around the site may well be congested at peak times, he considers that it would be unsustainable to argue that the additional 3 to 4 hourly vehicle movements would make the proposals unacceptable. These additional movements will be negligible and are well within standard daily fluctuations. He does not consider that additional modelling is required mindful of low additional traffic forecast.
- 5.2 The **Operational Manager, Waste Management**, has no objections to the application.
- 5.3 The **Operational Manager, Environment (Noise)**, has no objections to the application, noting that any noise impact would also be covered by the environmental permit conditions on the site.
- 5.4 The **Operational Manager, Environment (Air)**, notes that the Air Quality Assessment (AQA) has been produced following the Scoping Request for

Trident Park Viridor (Extra Tonnage per Annum). He has reviewed the AQA and is satisfied by the principles applied and findings produced. Drawing upon comments made by Public Health Wales (paragraph 7.8) in reference to the application and the need for the applicant to verify the modelling with their own monitoring, he can confirm this has been undertaken and correct procedures applied.

5.5 He notes the following conclusions in the AQA (Chapter 5 of the Environmental Statement):

- (i) the predicted impact of increased emissions from both the stacks serving the Trident Park ERF and additional vehicle movements as a result of the increased tonnage and the removal of the catchment restriction is less than 1% of the relevant long-term and short-term EAL for human receptors;
- (ii) the effect of this increased impact is considered to be 'negligible' and not significant;
- (iii) the change in predicted CLe and CLo impacts from both the ERF stacks and additional vehicle movements due to the increased tonnage and removal of waste catchment is considered insignificant and will cause '*no likely significant effects (alone and in-combination)*' for European sites, '*no likely damage*' for SSSI's and '*no significant pollution*' for other sites.
- (iv) the effect of the cumulative impacts (due to the entire ERF operating at the increased tonnage and the removal of waste catchment) on air quality at human receptors is considered to be negligible and not significant.
- (v) cumulative annual NOx impacts exceed 1% of the CLe for a very limited area of potentially sensitive vegetation within the Severn Estuary site. As stated in Chapter 7 '*it is considered unlikely that such impacts would be of significance at above a local level or constitute a likely significant effect.*
- (vi) the cumulative impacts of nitrogen and acid deposition are <1% of the CLo at all receptor locations and therefore will cause '*no likely significant effects (alone and in-combination)*'.

5.6 Overall it is therefore considered that the potential air quality effects resulting from the proposed increase in tonnage at the ERF and the removal of the catchment restriction will not be significant either alone or in combination.

5.7 In response to the third party objections questioning the adequacy of the AQA, he responds as follows:

- (i) They have thoroughly scrutinised the Environmental Statement and its associated Air Quality Impact Assessment;
- (ii) It must also be noted that report and its findings were further reviewed by Public Health Wales who also concurred with the conclusions made regarding the impacts on air quality.
- (iii) In summary the methodologies used within the assessment are deemed best practise in terms of undertaking air quality assessments. The

assessment indicated that the proposed changes will result in less than 1% of the relevant long-term and short-term EAL for human receptors, and will not result in a breach of the air quality objectives at any relevant receptor locations.

- (iv) In reference to the 1 hour NO<sub>2</sub> objective and the Councils monitoring being insufficient, the report provides conclusions based on best practise cited in appropriate guidance documents; Local Air Quality Management, Technical Guidance (TG16). The guidance supports the use of NO<sub>2</sub> diffusion tubes(which Cardiff use) as a means of determining the likelihood of exceedance for the short term 1 hour NO<sub>2</sub> objective as clearly stated in TG16;
- (v) Relationship between the Annual Mean and 1-hour NO<sub>2</sub> Objectives 7.91 Previous research carried out on behalf of Defra and the Devolved Administrations identified that exceedances of the NO<sub>2</sub> 1-hour mean are unlikely to occur where the annual mean is below 60µg/m<sup>3</sup>. This assumption is still considered valid; therefore local authorities should refer to it if NO<sub>2</sub> 1-hour mean monitoring data are not available (typically if monitoring NO<sub>2</sub> using passive diffusion tubes).
- (vi) Fundamentally the Trident Park ERF is regulated by Natural Resources Wales (NRW) under EP Regulations through a Part A Environmental Permit. The Permit contains conditions relating to emissions to air and monitoring requirements, therefore any potential visible plume and uncertainty surrounding the plumes emissions will be controlled via the permit and enforcement will fall under NRW's control. As stated in the Environmental Statement Air Quality Impact Assessment;
- (vii) 2.2.4 Environmental Permitting – In England and Wales, the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No.675) transpose the IED in UK legislation. The Trident Park ERF is regulated by NRW under the Environmental Permitting (EP) Regulations and NRW are responsible for regulating emissions to air from the ERF installation.

5.8 The **Council's Ecologist** has considered the impact of increased aerial emissions and increased road traffic emissions upon the sensitive habitats of the Severn Estuary. He is satisfied that the application has no other impacts upon nature conservation interests.

5.9 The potential impact upon the Severn Estuary designations have been assessed by the Habitats Regulations Assessment (HRA) document provided by SLR consulting, and by the further information dated 13<sup>th</sup> February 2017 entitled '*Further screening of potential significant in-combination effects of increased emissions to air from Trident Park ERF (16/02256/MJR) on the Severn Estuary SAC/SPA*'. He recommends that these two documents be taken as the Council's HRA of this project as required by Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended).

5.10 The conclusion of the HRA was that the proposed projects are not likely to have a significant effect upon the Severn Estuary European Marine Site, either alone or in combination with other plans or projects. He supports this conclusion.

- 5.11 The Severn Estuary is also a Site of Special Scientific Interest (SSSI), and as a Competent Authority Cardiff Council has statutory duties in relation to SSSI under Section 28 of the Wildlife and Countryside Act 1981, as substituted by Schedule 9 of the Countryside and Rights of Way Act 2000. However, the features of the SSSI are broadly the same as those of the European Marine Site, so the assessment of no likely significant effect also applies to the features of the SSSI.

## 6. **EXTERNAL CONSULTEES RESPONSES**

- 6.1 The **Welsh Ministers** have been notified of the application in accordance with The Town and Country Planning (Environmental Impact Assessment) Regulations 2016 (as amended). Any comments received will be reported to Committee.
- 6.2 **Dwr Cymru Welsh Water** does not have any comments to make however they advise that the applicant would need to contact their trade effluent office to discuss the proposal as the consent they currently hold to draindown their boilers once or twice a year for maintenance may increase as a result of this proposal.
- 6.3 **Natural Resources Wales** does not object to the variation of condition 22 of 10/00149/E so that the energy recovery facility shall not treat in excess of 425,000 tonnes of residual waste per annum at Cardiff Energy Recovery Facility, Trident Industrial Park. They have reviewed the information in the Environmental Statement Technical Appendix 5-1 Air Quality Impact Assessment by SLR dated September 2016. They consider the contribution to aerial pollutants assessed due to the proposal to be not significant to the interest features of the designated sites within the relevant screening distance.

## 7. **REPRESENTATIONS**

- 7.1 **Councillor G Marshall** records her strong objection to the expansion outside of South East Wales. There will be an accompanying increase in traffic, noise and air pollution if this application is granted. Once again, Splott will bear the brunt of this.
- 7.2 The application was publicised by **press and site notices** on 27<sup>th</sup> October 2016 in accordance with the requirements of Article 12 of The Town and Country Planning (Development Management Procedure) (Wales) Order 2012 and Regulation 22 of The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2016. 10 no. site notices were placed in the vicinity of the application site, consistent with previous applications, at the following locations:
- (i) Galleon Way;
  - (ii) Adventurers Quay;
  - (iii) Falcon Drive;
  - (iv) Bute Street;
  - (v) Schooner Way;

- (vi) East Tyndall Street;
- (vii) Ocean Way;
- (viii) Glass Avenue;
- (ix) Splott Road; and
- (x) Muirton Road.

7.3 A **petition** signed by 73 no. residents of Adventurers Quay has been received objecting to any increase in the present limit of 350,000 tonnes per annum of waste processed at the Viridor facility and to the removal of the South East Wales catchment area restriction. They call upon Planning Committee to reject the applications.

7.4 The occupiers of **91 Adventurers Quay** object to the application for the following reasons:

- (i) The 350,000 tonnes limitation was based on the applicant's design submission to build a facility with a capacity of 400,000 tonnes and an operational annual availability of 87% (sufficient to process 348,000tpa) and was a significant factor in the determination not only of the design of the ERF facility but also its potential impact on the environment, local community, transport levels etc. A change in this limit will therefore impact on all of these issues.
- (ii) The reasons given for a proposed increase are that it is now considered that an ERF availability of 95% is deliverable and that experience is showing that the CV of the "black bag waste" is lower than originally assumed (closer to 9 MJ/kg than 10 MJ/kg). It is disconcerting to find that within only 18 months of operation, such variations in significant factors used in scoping the plant design are now being suggested. The Trident Park Plant design was based on an availability of 87%. What is the impact of an 8% increase in plant availability to 95% of the year on aspects such as plant maintenance and safety among other issues?
- (iii) Why is the CV of the plant's fuel (residual or 'black bag' waste) now lower than originally assumed? The actual figure for the CV is not given but a worse case value of 9MJ/kg has then been used in the submission to determine that the proposed increase in the limit should be 75,000 tonnes. However, using a best case value of 9.49 MJ/kg would result a reduced potential increase of 50,000 tonnes. What is the actual CV figure? Further details should be provided.
- (iv) The references in the application to significant carbon benefits and Welsh Policy objectives are laudable but of no direct benefit to the residents of Cardiff in localities most likely to be affected by such a proposed change. One of the strategic outcomes defined to achieve Cardiff's vision to become a world class European city while being the heart of a thriving city region is that people in Cardiff have a clean, attractive and sustainable environment. This vision will not be achieved by approving such increases as proposed in this application.
- (v) The proposed change is a very significant increase (21.4%) in the present allowed tonnage limit which is currently sufficient to cover the needs of South East Wales. Approval of such an increase and any related move to extend the source of fuel waste to outside the current

catchment area would be a major change to the original planning permission. As such, this, and the related application, should have received wider public notification including, most definitely, the posting of notices in the localities most likely to be affected. The Planning Committee should be aware of as many views as possible when making their decisions.

7.5 In respect of the public notification of the planning applications, the occupiers of **91 Adventurers Quay** state:

- (i) Publicity has been inadequate, especially regarding the posting of site notices in localities most likely to be affected. No public notices were posted in the vicinity of the Adventurers Quay and Celestia residential developments which house well in excess of 1000 people and are located some 650 metres from the Trident Park incinerator.
- (ii) The Local Planning Authority subsequently confirmed that a site notice had in fact been displayed at Adventurers Quay since 27 October 2016. A notice for planning application 16/02256/MJR was then located affixed to a lamp post some 50 metres or so from the rear vehicle entrance to Adventurers Quay (see photos below). Residents entering by car would not be aware of a notice at this point and the pavement is used by very few of the residents. The main pedestrian entrances used by residents are accessed via the “fish bridge” adjacent to Celestia. The siting of the notice on the lamp post at this location is totally unacceptable.
- (iii) The Local Planning Authority also stated that a site notice had been put up in Falcon Drive – the vehicle access route to Celestia. There is no visible sign of any planning notice in Falcon Drive and the Celestia Gatekeepers Office are not aware of any being present in the four weeks since the end of October. In addition, only one site notice (at the site entrance to the Trident Park plant) was posted to alert the public to the proposal to remove the South East Wales catchment area waste restriction (16/02384/MJR). The reason given was that “the publicity requirements differ for application to vary legal agreements”.
- (iv) The original decision to grant planning permission was very controversial, the level of publicity given to the application being one of questions raised. This important change to the planning permission conditions should therefore have been treated as an exceptional case and full publicity given to it.
- (v) For the reasons given above, the Council has failed to adequately publicise applications which propose significant changes to the operation of the plant. They therefore request the deferment of any determination of the applications until adequate publicity and public consultation has been undertaken.

7.6 **Seel & Co, on behalf of the 400+ residents of Adventurer’s Quay**, objects to the application for the following reasons:

- (i) The increased tonnage will inevitably lead to an increase in heavy goods traffic and the associated vehicle pollution, wear and tear, potential traffic congestion and inconvenience.

- (ii) There are inevitable concerns about general pollution levels from the plant and that an increase in throughput could lead to an increase in chemical and particulate air pollution locally;
- (iii) The residents are concerned that their quality of life may be affected;
- (iv) The consultation processes have not been conducted so as to properly include the residents of Adventurers Quay. There was widespread ignorance of the proposals at the recent owner's AGM and great concern has been raised by owners subsequently that had they been properly consulted many would have raised individual objections and concerns at the proposals. It has been suggested that there has been maladministration in the lack of appropriate and transparent consultation and there should be a judicial review of the conduct of the Local Planning Authority.

7.7 An objection has been received from **Travis Perkins, Trident Industrial Park**, who express serious reservations about an increased workload for the site as there are unacceptable levels of smells coming from the plant and increased volumes can only increase their exposure to the smells.

7.8 **Public Health Wales** has consulted with their colleagues at the Environmental Public Health Service and their assessment is based on actual or potential health risks from environmental exposures to chemicals, noise and extreme environmental events such as flooding.

7.9 They note that the plant has been operational for two years and has consent to treat 350,000 tonnes of waste per annum. Improved plant availability and a lower than estimated energy content of the waste fuel has resulted in the facility having the capability to process more waste and recover more energy than is currently allowed by the planning permission. They note that the stack height will remain unchanged and the diameter will increase from 1.78 metres to 1.9 metres.

7.10 They have no grounds for objection based upon the public health considerations contained in the application.

7.11 The air quality assessment accompanying the application predicts the environmental concentration of emissions. They note that this assessment finds that the highest cumulative (plant and vehicle emissions) annual average NO<sub>2</sub> process contribution and highest cumulative annual average PM<sub>2.5</sub> process contribution at a receptor are predicted to occur at the same receptor point, the Travellers site on Rover Way.

7.12 The assessment concludes that the impact of increased emissions from the stacks and additional vehicle movements is considered to be 'negligible' and not significant. The proposed changes will result in less than 1% of the relevant long-term and short-term EAL for human receptors. The proposed change will not result in a breach of the air quality objectives at any relevant receptor locations.

7.13 **Cardiff Against the Incinerator (CATI)** make the following objections:



- (i) There are no responses from statutory consultees (WG and NRW), nor any evidence that they have been consulted, as required for an EIA application;
- (ii) They support the objections from residents of Adventurers Quay;
- (iii) They request that this application be considered by Planning Committee;
- (iv) They have submitted photographs which clearly show visible smoke plumes from the incinerator which do not disperse away from populated areas, contrary to the applicant's claims. The visible plume is detrimental to the image of Cardiff Bay and significantly worsens the visual impact of the tall chimney;
- (v) Council officers have failed to address the issue of odours from the plume being present at ground level;
- (vi) Topography of Cardiff Bay is inadequately included in the plume dispersion modelling. The wind directions, strengths and variability differ strongly from those assumed from Rhoose, with its open plain situation. Circulating boundary air around the Cardiff basin is trapped below higher level westerlies. Eddies come off Penarth Head towards the stack. Recent summers have shown many more times of southerly and easterly winds than in the old 10-year records used;
- (vii) High levels of NO<sub>2</sub> would be associated with plume grounding (and plume impact on high-rise apartments), but this is not considered in the reports. It requires continuous monitors sited at appropriate receptors – the Council's diffusion tube results for NO<sub>x</sub> are useless for assessing the problem.
- (viii) They have submitted plume pictures which show the plume sometimes lacks buoyancy, sometimes blowing straight from the top of the stack. The NRW declined to take their own pictures (best is from 2 or 3 cameras simultaneously from aspects around the stack) e.g. Rumney Hill, Llandough Hill and Penarth pier. The plume visibility does not conform to models, so may be beyond-design operation. This implies the parameters assumed for Air Quality modelling are unreliable – none of the claimed results can be taken as secure. As above, it requires continuous NO<sub>2</sub> monitoring at appropriate sites.
- (ix) The application must be deferred to address these issues;
- (x) The Scoping by the Council is just pedestrian and desk-based, ignoring the actual issues as aired at the Liaison group. Worse, it does not cover the environmental significance of going against the Wales Waste Plan. Flouting waste planning principles have not only indirect effects (waste tourism; lorry trips, passing on our waste problems to others) but could also have the effect of gaining more business for inefficient disposal in the Viridor incinerator. Cardiff Council failed to impose a requirement for energy-efficient CHP on Viridor and they with the Welsh Government have failed since then to make any progress – despite policy for “high efficiency” CHP and a target level of 60% thermal efficiency. Viridor's 22% is dismal in any comparison with CHP.
- (xi) The Air Quality Assessment (AQA) is quite inadequate, going through the motions rather than addressing the identified problems;
- (xii) The AQA wrongly uses a short-cut relating to traffic NO<sub>2</sub>, to disregard incinerator NO<sub>2</sub> peaks;

- (xiii) The AQA admits that topography can be important but nowhere do they admit to the known term “plume grounding”. Smell of the plume is recorded on occasions at the Rumney hillside housing above New Road. This is higher than Rover Way, considered by Viridor’s report as the most affected receptor. Galleon Way is mentioned, but nothing about the upper floor flats, which are above the ground boundary layer and experience the plume directly. This and neighbouring blocks of flat disturb the plume, but the modelling does not include them – Galleon Way being the closest generates turbulence in its wake, Adventurers Quay creates downwash with potential grounding in its wake;
- (xiv) The continuous monitor mentioned at Cogan is adjacent to a high traffic road low down in the dip; the plume is mostly unlikely to ground here – it is more likely to ground on St Augustine’s Hill, directly in the sight-line and where the complex headland topology is not modelled to small scales needed for plume grounding here.
- (xv) These problems are too complex for modelling – direct monitoring during present operations of the plant can and should be demanded, as observed patterns of the plume show anomalous behaviour compared with models and detected smells show plume grounding and plume impact of the Galleon Way flats, which is supposed not to occur. Any NO<sub>2</sub> detected would be an indicator of potentially more toxic trace components of gas and nanoparticles, whose health impacts need to be specifically assessed.

7.14 Following the receipt of further information (see paragraph 1.15), a 21 day re-consultation took place on 16<sup>th</sup> February 2017 under Regulation 22 of The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016. Three additional objections were received from the occupiers of 36 Madoc Road, Tremorfa, 219 Adventurer’s Quay plus one unaddressed email who oppose the application for the following reasons:

- (i) The removal of any restrictions on volumes of waste incinerated and increasing the catchment of the incinerator contradicts current International, Welsh Government and Cardiff Council policies of reducing the amount of waste produced by giving, in effect a ‘green light’ to increase waste production by providing increased capacity at the incinerator.
- (ii) The applicant is bound to say that there will be no effect on the environment from air pollution, traffic generated and noise however the amount of airborne particulate has made a marked increase since the incinerator opened and again when the capacity was increased previously.
- (iii) Any increase in waste incinerated will lead to an increase in HGV traffic on local and new routes outside the current catchment area, to supply the incinerator and put these additional vehicles onto an already congested roads network around Cardiff, which are all already in a very poor condition of repair. Increased vehicle movements will lead to longer journey times, increased noise pollution and increased particulate pollution from the extra vehicles as well as an increased risk to non-vehicular road users in south central Cardiff area.

- (iv) An increase in waste will also lead to increased airborne particulate being released into the atmosphere when it is incinerated.
- (v) The incinerator should never have been built where it was in the first place.
- (vi) Damage to the health and wellbeing of 10,000s of people for profit.
- (vii) Cardiff Council should follow their own – and national / international – policy and reduce waste, not encourage the production of more, by allowing more to be incinerated to the further detriment of the residents and environment of south central Cardiff.
- (viii) This application should be refused.
- (ix) The development is close to residential and wetland areas.
- (x) Pollution from site has led to increased deposits on their property which exceed usual weathering and wear and tear. This is irresponsible and generates health concerns for humans and wildlife.

7.15 **Public Health Wales** notes that further information has been submitted in the form of a revised Habitats Assessment, however this is outside their scope to comment upon.

## 8. **ANALYSIS**

8.1 The existing Energy Recovery Facility (ERF) building and site layout would not change as a result of this application being approved. The key issues in the consideration of this application to increase the annual tonnage limit by 75,000 tonnes to a maximum of 425,000 tonnes were identified in the scoping exercise undertaken prior to the submission of the application. This scoping exercise identified 5 topics where such an increase in annual tonnage may have significant environmental effects, as follows:

- (i) Traffic;
- (ii) Air Quality;
- (iii) Noise;
- (iv) Ecology; and
- (v) Climate Change

8.2 Each of these 5 topics are now considered in turn.

### **Traffic**

8.3 An additional 75,000 tonnes per annum of waste would result, on average, in 17 additional HGVs (34 movements) per day or 1 to 2 additional HGVs (3-4 movements) per hour. It is noted that the Operational Manager, Transportation, accepts the findings of the Transport Assessment (TA) which concluded that the roundabout at Ocean Way/Glass Avenue is currently operating within capacity and can therefore satisfactorily accommodate the increase in waste trips. He was also satisfied that the HGVs do not need to pass through nearby residential areas as the site is well-connected to the trunk road network. Indeed, the original Section 106 Agreement identifies the permitted routes for HGVs for this specific reason.

- 8.4 The Operational Manager, Transportation, concluded that it would be unsustainable to argue that an additional 3 – 4 hourly vehicle movements would make the proposals unacceptable given that, in his view, the additional movements will be negligible and well within standard daily fluctuations.

### **Air Quality**

- 8.5 The proposed increase in annual tonnage will result in an increase in the potential emission rate of pollutants to air from the stacks serving the ERF process and additional vehicle emissions associated with the delivery of waste and export of residues. The assessment sought to determine the potential effect of these emissions on the air quality environment.
- 8.6 It is noted that the Operational Manager, Environment (Air), is satisfied by the principles applied and findings produced in the Air Quality Assessment (AQA). He also acknowledges that the applicant has verified the modelling with Public Health Wales' monitoring.
- 8.7 The AQA (Chapter 5 of the Environmental Statement) concludes, overall, that the potential air quality effects resulting from the proposed increase in tonnage at the ERF will not be significant.

### **Noise**

- 8.8 The Noise Impact Assessment (NIA) carried out measurements at 5 receptor locations in the vicinity of the application site, including Adventurers Quay. At each of these locations it was found that the additional HGV movements would not cause an increase in the ambient noise level during quieter periods and the cumulative noise level (baseline plus predicted HGV noise levels) during noisier periods does not cause an exceedance in the daytime external noise limit of 55dBA.
- 8.9 Members are advised to note that the Operational Manager, Environment (Noise) has no objections to the application, noting that any noise impact would also be covered by the environmental permit conditions on the site which falls under the remit of Natural Resources Wales (NRW).

### **Ecology**

- 8.10 Given that there is no amendment to the site or the existing building footprint under this application, it was considered that there would be no direct impact from the development on nature conservation interests, although it was recognised that there may be indirect impacts. The Ecology Impact Assessment (EclA) has therefore considered the potential indirect impacts of increase air and traffic emissions.
- 8.11 Overall, the EclA found that no significant effects are predicted in respect of all emission types from the proposed increased tonnage alone. However, it did discover that a localised ecological impact may occur when the proposed increase is assessed in combination with existing permitted emissions. This is

in respect of NO<sub>x</sub> deposition within a restricted interface between the Severn Estuary and Rover Way, where a mix of shingle and gravel, inter-tidal mud and saltmarsh occurs; the latter is considered to represent a sensitive habitat to aerial deposition.

- 8.12 The EclA concludes that the area concerned is already subject to deposition levels which exceed the critical loads for NO<sub>x</sub> and whilst the proposed changes would add to these, when the size of the designated site (656 hectares) and total extent of saltmarsh (4.5 hectares or 0.7%) is taken into account it is considered unlikely that such impacts would be of significance at above a local level or constitute a likely significant effect.
- 8.13 It is noted that Natural Resources Wales (NRW) agrees with this conclusion, advising that the contribution to aerial pollutants assessed due to the proposals will not be significant to the interest features of the designated sites (see paragraph 6.3).
- 8.14 The Council's Ecologist is satisfied with the submitted ecological information, including the further information comprising an 'in-combination' assessment of the development with other sites in the locality. He agrees with the conclusions of the Habitats Regulations Assessment that no direct ecological impacts will arise and, overall, no significant effects will occur on the Severn Estuary designations, nor does he consider that the interests of the Site of Special Scientific Interest (SSSI) would be adversely affected.

### **Climate Change**

- 8.15 The climate change assessment has concluded that the treatment of waste in the Facility is shown to have delivered significant carbon benefit over the disposal of the waste to landfill. In 2015, the impact of processing 350,000 tonnes of waste achieved a carbon benefit of c.116,000tCO<sub>2</sub>e and a net benefit of c.188,000tCO<sub>2</sub>e when compared to a baseline of continued landfill disposal.
- 8.16 In the event of the variation of Condition 22 being approved, the increased annual tonnage is projected to result in significant environmental benefits due to waste being diverted from disposal to landfill to the ERF. A carbon benefit of c102,000tCO<sub>2</sub>e in 2017 is projected in the event that the facility operates with 425,000 tonnes per annum – a net carbon benefit of c,35,000tCO<sub>2</sub>e over and above a situation in which permission is refused and the additional 75,000 tonnes continues to be delivered to landfill.
- 8.17 It is considered that these benefits should be welcomed, being consistent with national planning policy to ensure that Wales plays its fullest possible part in reducing its carbon footprint (PPW9 paragraph 4.5 and Section 12).

### **Third Party Objections**

- 8.18 In respect of third party objections summarised in Section 7 which have not already been addressed in this report:

- (i) The Environmental Statement has demonstrated, to the satisfaction of officers, that residents of Splott and Butetown will not be adversely affected by an increase in the annual tonnage to the ERF;
- (ii) It is recognised that an increase in annual tonnage received at the ERF has the potential to cause significant environmental effects which is why the application is accompanied by an Environmental Statement to determine the potential impacts;
- (iii) In respect of the impact of an increase of plant availability to 95% upon maintenance and safety, the agent clarifies: *“In addition to the daily planned operational maintenance, the plant is subject to two periods, or one longer period of programmed shut down maintenance a year which is in line with industry standards. Paragraph 3.17 of the Waste Planning Assessment confirms that after allowing for the periods of shut down maintenance the plant could be available for up to 347 days a year which equates to 95% availability. Whilst there are up to two periods of planned shutdown maintenance planned for the year, there may be a requirement to shut down for additional maintenance and where that occurs availability will be reduced. This will have a knock on impact on the tonnage that the plant is able to process. Like any plant and machinery regular maintenance is vital to ensure that it continues to do what it is designed to do – to provide a safe working environment for those that operate it and to continue to provide a reliable service to long term contracts whilst operating within the strict emission controls set by the Environmental Permit. The applicant is fully committed to running a safe, well maintained and environmentally compliant facility.”*
- (iv) It is not possible for the applicant to provide a specific calorific value (CV) for the residual waste. The agent clarifies: *“...the plant is wholly dependent on the waste it receives which varies on an hour by hour / day to day basis. Operational experience shows that the CV tends to fluctuate between 9 and 10, sometimes dipping below and sometimes above. If the CV was to go up to 10 or above then it would simply mean that the plant would not need as much waste to deliver its thermal design. Hence the application is to process up to 425,000tpa – if the CV of the waste is at the high end of its range and/or availability is at the low end of its range then not all of the tonnage increase applied for would be utilised.”*
- (v) It is considered that the significant carbon benefits achieved by the development by avoiding deposition of residual waste to landfill will help the delivery of a clean, attractive and sustainable environment;
- (vi) The application has been publicised in accordance with the requirements set out in legislation (see paragraph 7.2). The approach taken is consistent with that undertaken for previous applications. It is not considered necessary to defer determination of this application to enable further consultation to be carried out;
- (vii) It is not considered that the amenities, quality of life or health of residents from Adventurer’s Quay, or any other residential area, will be adversely affected by the proposed increase in tonnage;
- (viii) The Welsh Government and Natural Resources Wales (NRW) were notified of the application. The response by NRW is summarised in paragraph 6.3. No response has been received from the Welsh

- Government;
- (ix) The Council's scoping opinion, requested by the applicant to aid their preparation of the Environmental Statement, was produced in consultation with key internal and external consultees and is considered to accurately identify the topics requiring assessment;
  - (x) Separate discussions are continuing between the Council, the applicant and stakeholders regarding the use of power generated at the facility in the local area.
  - (xi) In respect of the objections by CATI regarding specific aspect of the Air Quality Assessment, the Operational Manager, Environment (Air), has provided a further response re-iterating his satisfaction that the AQA is satisfactory and no further modelling or reporting is required (paragraph 5.7). Public Health Wales have also confirmed they concur with the assessment. He advises that the assessment's methodologies are deemed best practice and, fundamentally, the ERF is regulated by Natural Resources Wales (NRW) under EP Regulations through a Part A Environmental Permit. The Permit contains conditions relating to emissions to air and monitoring requirements, therefore any potential visible plume and uncertainty surrounding the plumes emissions will be controlled via the permit and enforcement will fall under NRW's control.

### **Other Considerations**

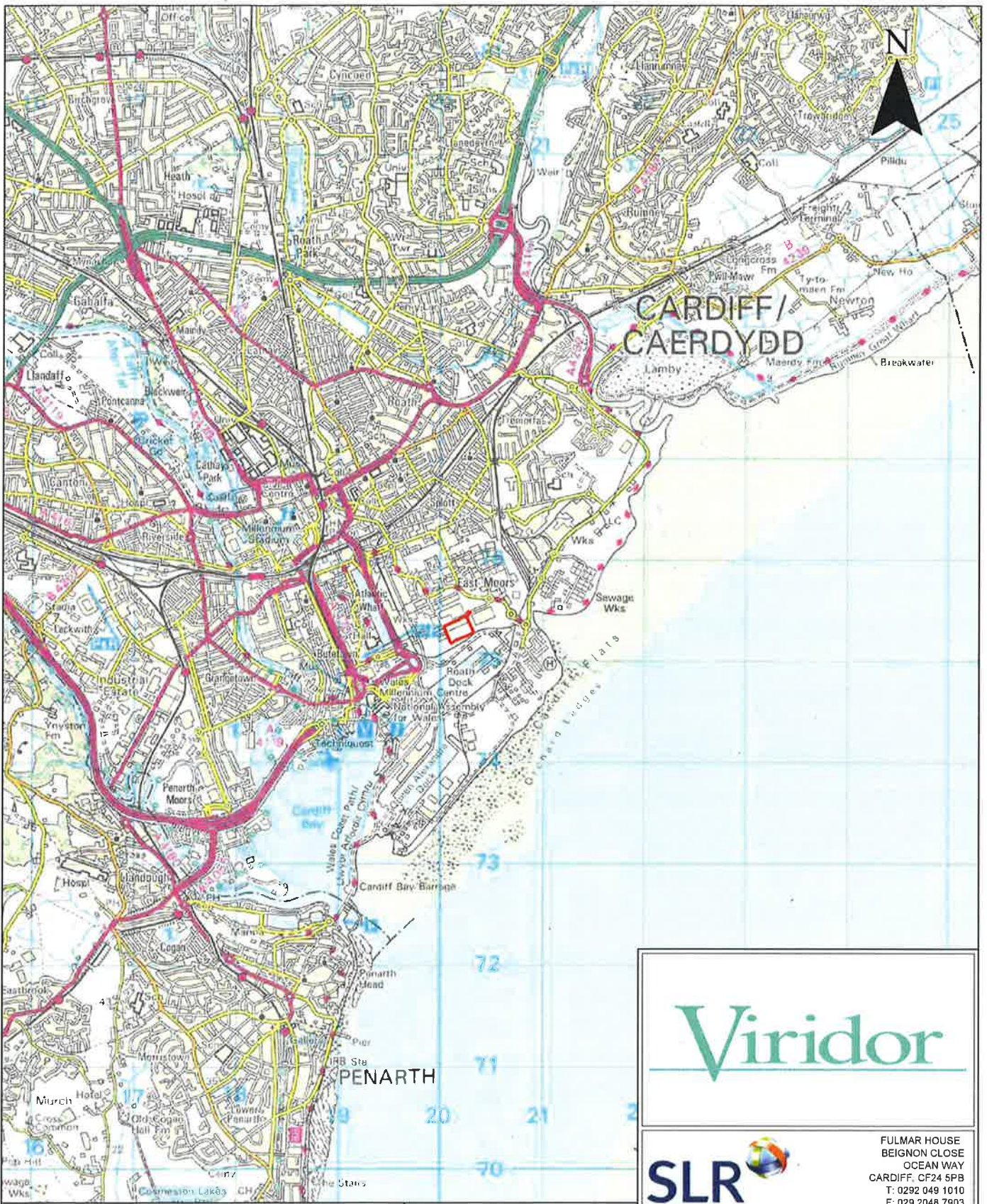
- 8.19 *Equality Act 2010* – The Equality Act 2010 identifies a number of 'protected characteristics', namely age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; sexual orientation; marriage and civil partnership. The Council's duty under the above Act has been given due consideration in the determination of this application. It is considered that the proposed development does not have any significant implications for, or effect on, persons who share a protected characteristic
- 8.20 *Well-Being of Future Generations Act 2016* – Section 3 of this Act imposes a duty on public bodies to carry out sustainable development in accordance with the sustainable development principle to act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs (Section 5). This duty has been considered in the evaluation of this application. It is considered that there would be no significant or unacceptable impact upon the achievement of wellbeing objectives as a result of the recommended decision.

## **9. CONCLUSIONS**

- 9.1 The application is accompanied by an Environmental Statement which has assessed whether the proposed increase in annual tonnage would result in significant environmental effects in respect of transportation, air quality, noise, ecology and climate change. In each case no significant effects on the environment have been identified and, in respect of climate change, significant environmental benefits have been identified through diverting the additional waste from landfill. This environmental information has been taken into consideration in the determination of this application.

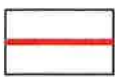
- 9.2 It is noted that the statutory consultees have accepted the scope and findings of the Environmental Statement and do not dispute the conclusions.
- 9.3 The alternative development option to 'do nothing' and continue to restrict the operation of the Energy Recovery Facility (ERF) to 350,000 tonnes per annum would result in waste that is suitable for energy recovery continuing to be landfilled. This would prevent the existing ERF from generating renewable/low carbon energy to its full operational efficiency. It is also noted that the ERF is currently the only operational facility in Wales.
- 9.4 PPW9 advises that Local Planning Authorities should aim to maximise the use of existing infrastructure (paragraph 12.1.6). The long-term contracts currently in place to receive municipal waste from landfill across the SE Wales Region would continue unaffected by the removal of the catchment restriction (These contracts include Prosiect Gwyrdd, a 25 year partnership between the Councils of Caerphilly, Cardiff, Monmouthshire, Newport and the Vale of Glamorgan to process approximately 200,000 tonnes per annum and Tomorrow's Valley, a 25 year partnership between Rhondda Cynon Taf, Merthyr Tydfil, Blaenau Gwent and Torfaen Council for the treatment of up to 100,000 tonnes per annum).
- 9.5 It is considered that the application accords with national and local planning policies and it is recommended that permission be granted, subject to relevant conditions.





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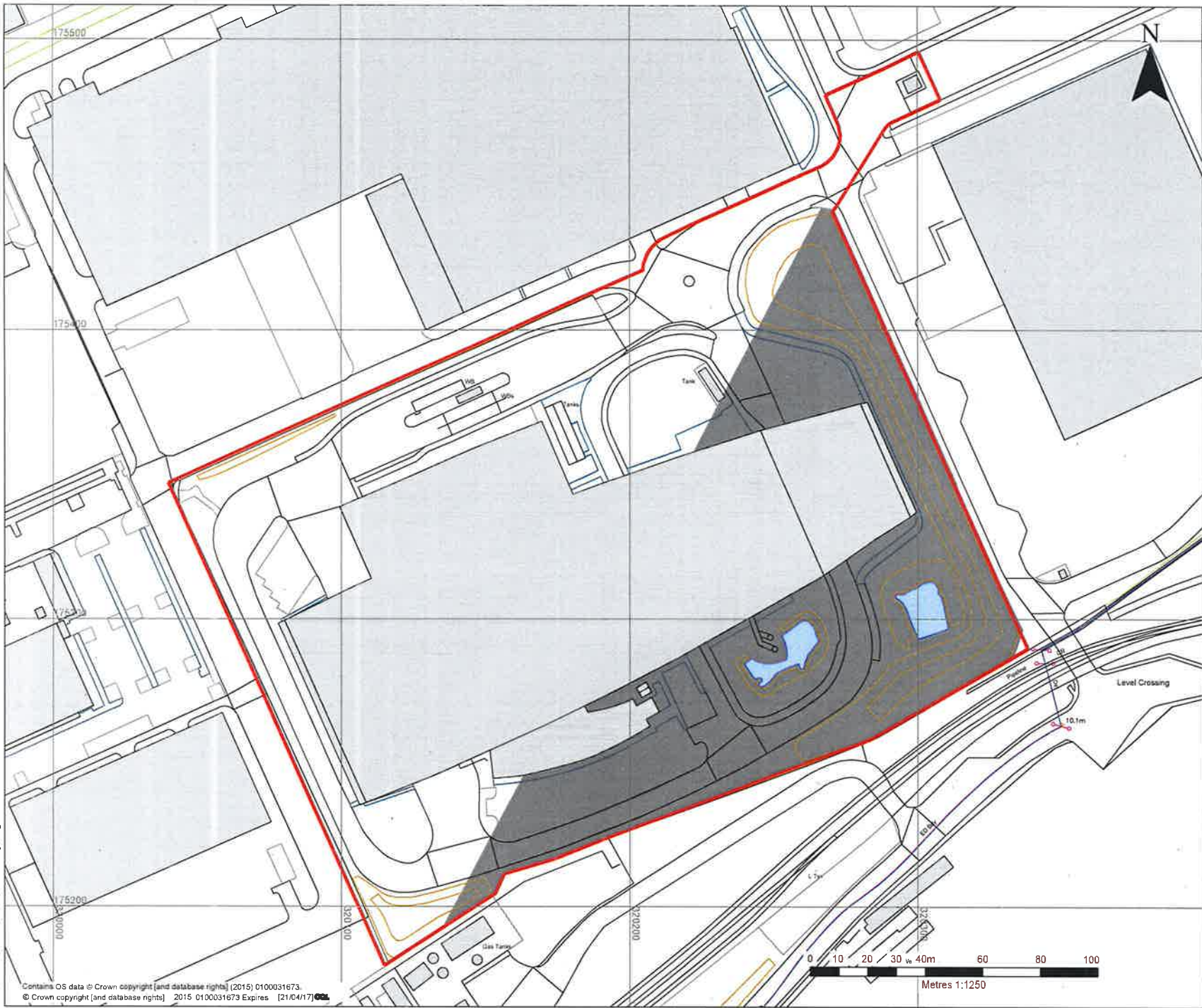
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 CARDIFF, CF24 5PB  
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 F: 029 2048 7903  
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02

Scale 1:1250 @A3

Date APRIL 2016



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## 9.0 CONCLUSIONS

### 9.1 Introduction

The EIA process has identified the likely significant effects of the proposed development as follows:

- Traffic;
- Air Quality;
- Noise;
- Ecology; and
- Climate Change.

Effects that are not considered to be significant, because there would be no change to the existing ERF building, are as follows:

- Geology and Soils;
- Water;
- Landscape and Visual; and
- Cultural Heritage.

### 9.2 Traffic

The traffic assessment has concluded that the proposed waste tonnage increase would generate approximately 17 additional HGVs (34 movements) a day and for robustness has assumed a maximum of 3 HGVs (6 movements) an hour on the local highway network during both morning peak and evening peak.

Traffic surveys and capacity assessments have been undertaken at the Glass Avenue roundabout which concluded that the roundabout currently operates satisfactorily and would continue to do so with the proposed additional waste trips.

It is considered that there are no transport related issues that would prevent the proposed changes going ahead.

**No significant adverse effects on the environment identified.**

### 9.3 Air Quality

The air quality assessment has concluded that:

- the predicted impact of increased emissions from both the stacks serving the Trident Park ERF and additional vehicle movements as a result of the increased tonnage is less than 1% of the relevant long-term and short-term EAL for human receptors;
- the effect of this increased impact is considered to be 'negligible' and not significant;
- the change in predicted CLe and CLo impacts from both the ERF stacks and additional vehicle movements due to the increased tonnage is considered insignificant and will cause '*no likely significant effects (alone and in-combination)*' for European sites, '*no likely damage*' for SSSI's and '*no significant pollution*' for other sites;
- the effect of the cumulative impacts (due to the entire ERF operating at the increased tonnage) on air quality at human receptors is considered to be negligible and not significant;
- cumulative annual NOx impacts exceed 1% of the CLe for a very limited area of potentially sensitive vegetation within the Severn Estuary site. It is considered unlikely that such impacts would be of significance at above a local level or constitute a likely significant effect; and
- the cumulative impacts of nitrogen and acid deposition are <1% of the CLo at all receptor locations and therefore will

cause 'no likely significant effects (alone and in combination)'.

**No significant adverse effects on the environment identified.**

## 9.4 Noise

The assessment has concluded:

- The additional HGV movements would not cause an increase in the ambient noise level during quieter periods.
- The cumulative noise level (baseline plus predicted HGV noise levels) during noisier periods does not cause an exceedance in the daytime external noise limit of 55dB(A).

The impact of the HGV noise and the significance of the effect at each receptor location assessed is none

**No significant adverse effects on the environment identified.**

## 9.5 Ecology

The potential for direct ecological impacts has been discounted, as the proposed development utilises an existing building and infrastructure and does not require any loss of habitat or alteration of current site conditions.

Potential indirect effects upon off-site ecological features, in particular deposition of emitted products (from the facility and associated traffic) on ecologically designated sites have been subject to detailed consideration.

Overall, no significant effects are predicted in respect of all emission types from the proposed increased tonnage alone. A localised ecological impact may occur when the proposed increase is

assessed in combination with existing permitted emissions. This is in respect of NO<sub>x</sub> deposition within a restricted interface between the Severn Estuary and Rover Way, where a mix of shingle and gravel, inter-tidal mud and saltmarsh occurs; the latter is considered to represent a sensitive habitat to aerial deposition. The area concerned is already subject to deposition levels which exceed the critical loads for NO<sub>x</sub> and whilst the proposed development would add to these, when the size of the designated site and total extent of saltmarsh is taken into account it is considered unlikely that such impacts would be of significance at above a local level or constitute a likely significant effect.

**No significant adverse effects on the environment identified.**

## 9.6 Climate Change

The climate change assessment has concluded that:

- The treatment of waste in the Facility (during hot commissioning and in full operations) is shown to have delivered significant carbon benefit over the disposal of the waste to landfill.
- In 2015, the carbon impact of processing 350ktpa of waste (the current permission) at the Facility achieves a carbon benefit of c.116,000 tCO<sub>2</sub>e, and a net carbon benefit of c.188,000 tCO<sub>2</sub>e when compared to a baseline of continued landfill disposal.
- Approval of the variation application and therefore the treatment of an additional 75ktpa of waste at the Facility will deliver additional carbon benefits over the current permission.
- Approval of the application to increase the tonnage at the Facility to 425ktpa of waste will result in an additional carbon benefit of c.35,000 tCO<sub>2</sub>e in 2017.
- The results show that waste transported from outside the existing permitted catchment area exhibits similar net

carbon benefits (of c.400 kgCO<sub>2</sub>e or greater per tonne of waste) to the net carbon benefits of the treatment only scenario.

- Treatment of an additional 75ktpa of waste at the Facility will assist in minimising waste quantities to landfill and will contribute additional energy to the national grid, thus utilising domestic resources to produce energy for Welsh households and businesses.

On this basis, it is concluded that the proposed increase in capacity at the Facility will deliver significant additional carbon benefits, which can be delivered quickly and for the remainder of the life of the Facility.

Transportation of waste results in a carbon burden, however analysis has shown that the scale of the transport related carbon burden is relatively modest. The carbon burdens of transportation of waste from outside of the current South East Wales catchment area are far outweighed by the carbon benefits of moving waste up the hierarchy and diverting it from landfill disposal to recovery.

**Significant benefits to the environment identified.**

Diagram 2.7 – The Waste Hierarchy

