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Arolygydd a benodir gan Weinidogion Cymru

Dyddiad: 31 Hydref 2017

Report

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an Inspector appointed by the Welsh Ministers

Date: 31 October 2017

TOWN AND COUNTRY PLANNING ACT 1990

SECTION 62D

The Developments of National Significance (Wales) Regulations 2016

Application by Valero Energy Limited

Valero Pembroke Refinery, Pembrokeshire SA71 5SJ

Cyf ffeil/File ref: APP/N6845/A/16/3163511

Abbreviations used in this report:

AA	Appropriate Assessment
AQMA	Air Quality Management Area
CEMP	Construction Environmental Management Plan
CHIA	Cultural Heritage Impact Assessment
Cogen	The Cogeneration Plant
DNS	Development of National Significance
EIA	Environmental Impact Assessment
EcIA	Ecological Impact Assessment
EPS	European Protected Species
ERA	Ecosystems Resilience Assessment
GHLCIA	Geology, Hydrology and Land Condition Impact Assessment
HLCA	Historic Landscape Character Area
HRA	Habitats Regulations Assessment
LIR	Local Impact Report
LOHI	Landscape of Outstanding Historic Interest
LDP	Local Development Plan
LVIA	Landscape and Visual Impact Assessment
NOx	Nitrogen Oxides
NRW	Natural Resources Wales
NTS	Non-Technical Summary
NVIA	Noise and Vibration Impact Assessment
PCC	Pembrokeshire County Council
PCNP	Pembrokeshire Coast National Park
PCNPA	Pembrokeshire Coast National Park Authority
PINS (Wales)	The Planning Inspectorate (Wales)
PPW	Planning Policy Wales
PS	Planning Statement
SAC	Special Area of Conservation

SAM	Scheduled Ancient Monument
SoCG	Statement of Common Ground
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SSSI	Site of Special Scientific Interest
TA	Transport Assessment
TAN	Technical Advice Note
'The 1990 Act'	The Town and Country Planning Act 1990 (as amended)
'The 1990 PLBCA Act'	The Planning (Listed Buildings and Conservation Areas) Act 1990.
'The Habitats Regulations'	The Conservation of Habitats and Species Regulations 2010
'The Procedure Order'	The Developments of National Significance (Procedure) (Wales) Order 2016
WG	Welsh Government
'The WBFG Act'	The Well-Being of Future Generations (Wales) Act 2015
ZTV	Zone of Theoretical Visibility

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DNS Application Ref: APP/N6845/A/16/3163511

Site address: Valero Pembroke Refinery, Pembrokeshire SA71 5SJ

- The application, dated 26 June 2017, was made under section 62D of the Town and Country Planning Act 1990 (as amended by the Planning (Wales) Act 2015).
- The application is made by Valero Energy Limited.
- The application was confirmed as valid on 12 July 2017.
- Site visits were carried out on 5 and 6 September 2017.
- The development proposed is described as a Cogeneration facility to supplement electrical power and steam demands of the Refinery, comprising a 'simple cycle' cogeneration plant (also known as combined heat power-CHP-plant) generating up to 49.9MW electrical output from the combustion of natural gas in turbine generator(s). The facility will also produce superheated steam via a heat recovery steam generator. The development also includes ancillary infrastructure and electrical gas connections, all within the Refinery boundary.

Secondary Consent Applications

- No secondary consent applications are being made.

Summary of Recommendation: That planning permission be granted subject to conditions.

Procedural Matters

1. In accordance with Article 5 of The Developments of National Significance (Procedure) (Wales) Order 2016, the applicant notified PINS (Wales) on behalf of the Welsh Ministers of the proposed development on 31 January 2017. The notification was accompanied by a Screening Direction from Welsh Government (WG) dated 17 January 2017 recommending that EIA is not required.
 2. On 7 February 2017, PINS (Wales) wrote to the applicant with a Notice of Acceptance of a proposed application for a DNS under Article 6 of The Procedure Order. The submitted application was subject to appropriate pre-application consultation and publicity ending on 19 June 2017, and was accompanied by a Pre-Application Consultation Report, dated June 2017.
 3. On confirmation of the validity of the application on 12 July 2017, PINS (Wales) undertook the specified consultation and publicity measures as required by the Order. 2 letters of support and 6 other representations were received by the 16 August 2017 deadline. Pembrokeshire County Council subsequently submitted its Local Impact Report (LIR) on 25 August 2017.
 4. There is an error in the Cultural Heritage Impact Assessment (CHIA), the Landscape and Visual Impact Assessment (LVIA), the Planning Statement (PS) and the Non-Technical Summary (NTS) insofar as reference is made to the Grade I, Grade II and Grade II* Listed status of St Decumanus Church, respectively. In a letter dated 24 August 2017, the applicant acknowledges that the Church is Grade I Listed, and not Grade II or Grade II*. It is clarified that, although the classification was incorrectly stated, the Church has been correctly assessed to be of high value and high sensitivity and the conclusions of the CHIA, LVIA, PS and NTS are unaffected by the typographical error.
 5. Based on the Application Documents, the Pre-Application Report, the consultation responses, the Statements of Common Ground (SoCG) and the LIR, the application can be dealt with by way of the written representations procedure.
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6. I have structured the documents and plans lists as follows:
- Prefix A – Documents and plans submitted with the application;
 - Prefix B – Documents and plans submitted since the application was accepted as valid, including consultation responses and the LIR.

Site and Surroundings

7. The site comprises approximately 1ha within the existing Refinery, located towards its southern boundary. It is currently occupied in part by a disused workshop with associated pipework and a lay-down area (a hardstanding used for storage and fabrication). The site for the proposal also includes corridors of land for connecting infrastructure, areas for construction lay-down and temporary facilities for contractors.
8. The surrounding area consists of a combination of open rural landscape, heavy industry, villages, towns and the Milford Haven waterway (“the Haven”). Along the Haven there are a number of significant industrial installations, many associated with the energy industry, including the existing Refinery, power stations, LNG terminals, storage terminals, docks, ferry terminals, marinas and jetties together with vacant former industrial land.
9. There are no designated ecological assets within the site. The Milford Haven Estuary is in the order of 440m to the west at its closest point which, at this location, is designated a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). There are further SSSI’s and two further SAC’s within 10km of the site. Castlemartin Coast Special Protection Area (SPA) lies some 1.7km to the south.
10. The Pembrokeshire Coast National Park (PCNP) bounds the wider Refinery site to the west and is adjacent to the south west corner of the application site. The Pembrokeshire Coast Path (part of the Wales Coastal Path national trail) follows the western and northern boundaries of the Refinery.
11. The application site is not, in itself, historically sensitive. However, there are clusters of SAM’s and Listed Buildings some 180 metres to the south and 100 metres to the west, the closest of which are the Grade I Listed St Decumanus Church and associated structures at Rhoscrowther and the SAM and Grade I Listed Eastington Manor. The site is also within the Milford Haven Waterway Landscape of Outstanding Historic Interest (LOHI).
12. The Refinery is located on a 60mph unnamed road that provides access to the site and to the hamlets of Rhoscrowther and Wallaston Green beyond. Rhoscrowther is the closer of the two hamlets with 3no properties located some 145 metres from the application site, albeit separated by an intervening landscaped bank within the Refinery boundary. Two other former dwellings have been re-purposed as bat roosts and no longer have a residential use.

Proposed Development

13. The Co-Generation Plant (Cogen) would produce up to 49.9 megawatts electrical output from the combustion of natural gas in a combustion turbine generator. Superheated steam would be generated via a heat recovery steam generator. This would require connections to the Refinery’s steam infrastructure, as well as to natural

gas and electrical distribution systems. The proposed electrical and steam generation processes are described in detail in *Document Ref A DOC02*.

14. The use of waste heat (and the production of steam) would increase the overall efficiency of the proposed electrical generation plant. Due to the dual outputs from the plant (electricity and steam) it is referred to as a combined heat and power plant or Cogen plant. The development is expected to reduce the Refinery's operational costs and improve its energy security and thus improve the sustainability of the Refinery's operation. It is also expected to result in greenhouse gas emission savings compared to the separate production of heat and electricity.
15. The largest element of the proposed development is the heat recovery steam generator (which measures 13 metres wide x 31 metres long x 22 metres high) and its associated stack (approximately 35 metres high x 3 metres wide). The other elements of the development include a combustion turbine generator with acoustic enclosure, cooling infrastructure, switchgear, control room instrumentation system, local instrumentation and control system, over-ground natural gas pipeline, a 132kV metering skid (a framed device on which various assemblies are installed) and 3no electricity substations. (*Document Ref A DOC03d* comprises the planning drawings showing the proposed layout of the scheme and its various components).
16. The majority of traffic travelling to and from the Refinery uses the A477 via local distributor routes including the B4320, B4139 and A4075 through the eastern end of Pembroke town centre. Construction traffic would also adopt this route, with the exception of abnormal loads which would be shipped into the Refinery via the existing heavy lift wharf which is on Milford Haven waterway. Construction worker travel is largely expected to be by car, van and minibus, with a majority likely to be vehicle sharing due to workers generally operating in 'teams', thus reducing associated trips. The number of heavy goods vehicle movements associated with the construction would peak at eight two-way movements per day. It is not anticipated that there would be any increased transport movements once the Cogen Plant is operational.

Environmental Assessment (The applicant's case)

Ecology

17. An Ecological Impact Assessment (EcIA) has been undertaken (*Document Ref A DOC04c*) in accordance with standard assessment methods and criteria as set out in the Chartered Institute of Ecology and Environmental Management Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd Edition. Its scope and methodology was agreed with NRW.
18. The baseline of the EcIA has been informed by an ecological desk study, consultation and a series of ecological field surveys including Extended Phase 1 Habitat Surveys, bat surveys and badger surveys, undertaken between August 2016 and February 2017.
19. A Habitats Regulations Assessment (HRA) report has also been undertaken, due to the proximity to European Sites, which is detailed later in this report.
20. A similar assessment has been undertaken for national level designated sites, including Sites of Special Scientific Interest (SSSI's) and other sensitive habitats such as ancient woodlands to determine the likely effects from air pollutants. It was

agreed with Natural Resources Wales (NRW) that SSSI's sensitive to air pollution within 15km and ancient woodland sites within 2km are within the scope of the assessment.

21. There is also a need to consider ecosystems resilience as required by the Environment (Wales) Act 2016. Thus an Ecosystems Resilience Assessment (ERA) also forms part of the assessment, which follows the National Assembly for Wales Guidance in respect of such matters, identifying the ecosystems present and how they would be likely to be affected.
22. The EcIA identifies the habitats within or adjacent to the survey area. Three blocks of ancient semi natural woodland and four blocks of restored ancient woodland are identified within or partially within 2km of the survey area. Other habitats within the site, which are of local ecological value, include an area of mixed plantation woodland within and extending from the south of the development site and several areas of semi-improved neutral grassland on steep embankments throughout such areas of the Refinery site. Whilst areas of dense / continuous and scattered scrub ruderal vegetation (such as short perennial vegetation) and bare ground were identified, these are of negligible ecological value.
23. The Refinery is surrounded by habitat suitable for bats including areas of agricultural pastures, hedgerows, water bodies and small areas of woodland. Numerous records of bats of 10 species within the 2km search area were returned, with various roosts including maternity roosts and hibernacula. The southern mixed plantation woodland provided suitable connectivity to the wider landscape. The mitigation roost at Rhoscrowther is 40 metres from the development site.
24. In terms of nationally protected species, evidence of badger activity was recorded along the southern site perimeter fence on the mixed plantation woodland embankment and in dense scrub together with the surrounding agricultural fields. There was no additional activity recorded within the Refinery site, i.e. the area north of the embankment. The EcIA considers that the majority of habitats present within the development site offer limited opportunities for badgers, being dominated by built structures and areas of bare ground. As such, the use of the development site by one badger family is of no more than local ecological value.
25. Bird species present within the Refinery site are primarily common species, include a high proportion of Environment (Wales) Act 2016 Section 7 species (such as breeding herring gulls) and some Wildlife and Countryside Act 1981 Schedule 1 species (such as barn owl). The EcIA concludes that overall the assemblage would be of local ecological value and, if barn owl is present in the wider vicinity, this species is likely to be of county importance. However, this is not recorded as an important area for barn owl foraging and there are no records of nesting within the Ecological Zone of Influence of the proposed Cogen plant.
26. Nine records of common reptile species were returned. However, there is limited suitable habitat present within the development site to support reptiles. The embankments offer small areas of potentially suitable habitat, and are not directly linked to larger areas as they are isolated by bare ground and hardstanding. The grassland, scrub and plantation woodland on the southern site boundary offers potential for reptiles but, at most, these areas would support a small population. If

present, a small population of common reptiles would be of no more than local ecological value.

27. In view of the above the EcIA concludes that there are no significant residual impacts on ecological features due to the construction or operation either directly or indirectly, alone or in combination with other projects.
28. The ERA concludes that the ecosystems and their component parts identified within the proposed development either would not be affected or are resilient to disturbance, resist damage and, if damaged, would recover quickly.
29. The results of the screening assessment for 17 SSSI's which have been identified as potentially sensitive to air quality effects within 15km show that for all sites either the relevant criteria are either not exceeded or they are scoped out of requiring further assessment.
30. Whilst there are 7 ancient woodland sites within 2km of the project site, nutrient nitrogen deposition was the only air quality effect requiring further assessment for ecological receptors. However, given the small overall contribution to nitrogen deposition, and the lack of information indicating that this is a significant factor affecting the ancient woodlands in proximity of the proposed Cogen plant, no significant residual impacts arising from air quality are anticipated.

Habitats Regulations Assessment Report

31. Due to the proximity of the proposed development to European sites, a HRA report (*Document Ref A DOC04e*) has been carried out. It has been undertaken following the guidance set out by PINS (Wales) and that produced by Welsh Government on screening risks from air emissions on protected areas for nature conservation together with other guidance material produced by the European Commission.
32. In compiling the report, regular dialogue was had with NRW, PINS (Wales) and Pembrokeshire County Council. Key matters which the assessment had to consider were:
 - The effect of air pollutants emitted by the operating development on European sites within a 15km radius.
 - The effects on bats during construction operation and decommissioning which form part of the qualifying interest of the Pembrokeshire Bat Sites and Bosherton Lakes SAC.
 - In-combination effects with other pollution sources.
33. The HRA report identifies that habitats at the following European sites would receive pollutants from the development:
 - Pembrokeshire Marine SAC;
 - Limestone Coast of South West Wales SAC;
 - Castlemartin Coast SPA;
 - West Wales Marine candidate SAC;

- Pembrokeshire Bats Site and Bosherton Lakes SAC;
 - Skokholm and Skomer SPA;
 - Bristol Channel Approaches candidate SAC; and
 - Cleddau Rivers SAC.
34. The development would also affect bats which are part of the qualifying interest populations for some of the SAC's and which use the habitats adjacent to the southern boundary of the site as foraging habitat and a commuting route.
35. All other impacts arising from the development would be unlikely to have significant effects due to the lack of connectivity and / or distance between the European sites and the development.
36. The screening assessment found no likely significant effects on the qualifying interest features of the European sites from the development alone or in-combination with other projects.

Construction Environmental Management Plan

37. The CEMP has been produced to describe the measures that would be taken to avoid, minimise or mitigate construction effects on the environment and surrounding community. It states that it is at a strategic level of detail and that it would be further developed prior to commencement on site.
38. However, it outlines a commitment to ensuring that an appropriate programme of environmental monitoring is implemented during construction, including in the following areas:
- The potential for contamination to be present in excavated soils;
 - The potential for contamination of groundwater;
 - The control of emissions to air;
 - Traffic movements to and from the site;
 - Waste management; and
 - Lighting
39. The CEMP also sets out a series of site-wide environmental requirements that the contractor would be required to comply with. These requirements include the use of best practice means to prevent statutory nuisance occurring, in areas such as the storage and handling of spoils, the control of vehicle movements, the control of site operations and the avoidance of nuisance from exhaust emissions. However, it also specifies measures to minimise adverse effects on habitats and wildlife during construction, including the following:
- Measures to prevent incursion by construction personnel into areas of nature conservation value outside the development site and working areas;

- Measures to ensure there would be no risk to nesting birds, their nests, young and/or eggs, in particular by avoiding demolition works during the bird nesting season;
- A requirement to halt works until such time as consultation has taken place with the ecologist in the event of bats being discovered in trees or buildings during clearance or construction;
- A requirement to maintain a 30 metre buffer zone and a 100 metre percussive piling buffer zone from badger setts in order to avoid disturbance or damage;
- To take all necessary precautions to prevent the pollution of controlled water; and
- To position and direct any site lighting (if required) so as to minimise impacts to local wildlife sites and communities.

Landscape and Visual Impact

40. The LVIA has been undertaken with reference to the Guidelines for Landscape and Visual Impact Assessment 3rd Edition 2013 and NRW's LANDMAP guidance (*Document Ref A DOC04f*). The scheme has been assessed in respect of key landscape and visual receptors, the LANDMAP Aspect Areas and relevant planning policy.
41. The application site is entirely within the existing Refinery and within a local landscape which features very large industrial areas comprising of a power station and refineries/petrochemical facilities. Nonetheless the local landscape also includes sensitive receptors, including the PCNP, SAM's and Listed Buildings.
42. To assess effects initially a Zone of Theoretical Visibility (ZTV) model was developed to identify that a 5km radius study area was sufficient for the scale of the project. The ZTV also served to identify a range of potential viewpoints which were further refined by a site visit.
43. The representative views include those from long range such as Angle Bay, the Coastal Path and Milford Haven, views from higher land such as Green Hill Reservoir and closer range views at Eastington Farm and Rhoscrowther. The LVIA contains photographic views from each viewpoint and photomontages with and without the proposed development.
44. The LVIA concludes that the existing Refinery remains a striking feature in the landscape in terms of vertical elements (stacks to 170m) and its relatively large footprint. Within this context it has the capacity to absorb the development as a small modification to the existing Refinery and one in keeping with the established land use.
45. As such, it finds that overall the residual landscape and visual impacts of the development are not significant.

Cultural Heritage

46. A CHIA (*Document Ref A DOC04b*) has been submitted in relation to the development. Cultural heritage has been considered under the sub-topics of 'archaeological remains', 'historic buildings' and the 'historic landscape'. Archaeological remains are likely to have been totally removed as a result of long-

term presence of the Refinery within the footprint of the development. The scope of the assessment has been confirmed via consultation with Cadw.

47. The cultural heritage assets have been identified within the study area (a buffer area extending 2.5km from the boundary of the proposed development) as follows:

High Value

- Eastington Manor (Grade I Listed Building and SAM)
- Fort Popton (Grade II* Listed Building and SAM)
- St Decumanus Church (Grade I Listed Building)
- St Mary's Church (Grade II* Listed Building)
- Enclosure and Earthworks at Lewiston Hall (SAM)
- West Popton Camp (SAM)

Medium Value

- Standing Stone (Grade II Listed Building)
 - Rhoscrowther School (Grade II Listed Building)
 - Hilton Farm and Outbuildings, Rhoscrowther (Grade II Listed Building)
 - Old Henllan Stone Building and Garden Arch (Grade II Listed Buildings)
 - National School, Pwllcrochan (Grade II Listed Building)
48. With the exception of Eastington Manor, no impacts are predicted on the cultural heritage assets owing to screening of the development by intervening structures of the Refinery, extensive woodland and landform.
49. Construction is predicted to result in a slight change to the setting of Eastington Manor, comprising the permanent introduction of a 35 metre high stack into views from the Manor to the north as well as the movement from plant / cranes required to construct it. However, the CHIA recognises that this view already includes two existing large water tanks, clearly visible above the perimeter bund of the Refinery site. Consequently, the development is predicted to result in a minor magnitude of impact and a slight significance of effect on Eastington Manor.
50. The CHIA concludes that there would be no significant effects on cultural heritage are anticipated during operation of the development. No mitigation measures are thus proposed for construction or operation.

Traffic and Highway Safety

51. A Transport Assessment has been carried out (*Document Ref A DOC04h*) on the basis of the scope discussed with Pembrokeshire County Council. It considers matters of site accessibility, trip generation for the operational and construction phases of the development, traffic impact, potential cumulative impacts and road safety within the vicinity of the site.

52. The TA has concluded that once the development was operational there would be no increase in numbers of Refinery personnel and no change in the number of staff vehicles or parking provision on-site. There are no changes required or proposed to the existing access junctions to the Refinery or the surrounding highway network to accommodate the development or construction traffic.
53. The construction phase would result in approximately eight HGV movements a day during the peak. The number of personnel associated with the construction phase would be likely to peak at around 200-220 a day and, together with the existing personnel on site, would result in a total of some 875-895 people accessing the site daily.
54. It is intended that all abnormal loads required during construction would be brought in via boat using the Valero materials offloading facility. Consequently, there would be no adverse impact on the surrounding highway network as a result of abnormal load transportation.
55. The cumulative impact of the development along with the development sites that have been screened as having the potential for cumulative effects in combination with the development has been considered and it has been concluded that there would be no cumulative impact as a result of the development in highways and transport terms. It would have only a marginal impact on traffic levels in the local area and this would be for a temporary period only during the construction phase.
56. Furthermore, at the request of PCC, a comparison has been made between the construction phase and a major shutdown / turnaround phase (such events occur periodically to facilitate the maintenance of the Refinery). During a major shutdown / turnaround phase, there could be around 1500 total personnel on site on an average weekday with around 530 cars parked in the Refinery, and a further 100 vehicles accessing the site. It has therefore been concluded that, in comparison to this phase, which is already accommodated periodically at the Refinery and on the local highway network, the construction phase of the Cogen plant would result in considerably less vehicle movements both for staff and construction workers.
57. The submitted Traffic Management Plan outlines the specific arrangements relating to the traffic management for the construction of the proposed Cogen plant in order to minimise transport impact during construction. It does not apply to the operational phase. It identifies that the majority of construction traffic travelling to and from the Refinery would utilise the existing signed HGV route via the A477. Access to the site is gained via the second priority junction on the main approach road. Although all abnormal loads would be brought in to the site via the materials offloading facility, in the event of any abnormal loads arriving via the local highway network, advanced warning would be provided to the local authority with discussions to establish the most suitable approach and to avoid the highway network peak periods. Construction worker parking is accessed via the first junction on the main access road; it is anticipated that the parking demand associated with the construction phase would be accommodated within this existing car park.

Air Quality

58. An Air Quality Impact Assessment has been undertaken for the development to ascertain the net change in impacts on air quality in the vicinity of the Refinery due to

the operation of the development (*Document Ref A DOC04A*). It considers the potential for significant impacts due to nitrogen dioxide on sensitive human receptors close to the site and also the Air Quality Management Areas (AQMA's) in Pembroke Town and Haverfordwest. Impacts on sensitive ecological receptors within a 15km radius of the development were also assessed. Oxides of nitrogen, nutrient nitrogen deposition and acid deposition have been considered and incorporated into site specific baseline and critical loads assessment.

59. The assessment identifies that there would be no significant impacts associated with construction traffic. The potential for impacts to on-site operational equipment are identified associated with construction dust. With the implementation of suitable mitigation measures the impacts are predicted to be no worse than minor, if not negligible.
60. In terms of the operation of the project, there are predicted to be no significant impacts on sensitive human receptors. These include receptors within the AQMA's.
61. No likely significant effects were predicted on European sites of nature conservation importance from the development, either alone or in combination. No significant effects were predicted on SSSI's or ancient woodland.

Noise and Vibration

62. A Noise and Vibration Impact Assessment (NVIA) has been conducted (*Document Ref A DOC04g*) to consider the potential for significant effects from noise during construction, commissioning and operation. Operational noise effects at residential dwellings in Rhoscrowther, Eastington Farm and Angle have been assessed using BS4142:2014 *Methods for Rating and Assessing Industrial and Commercial Sound*, whilst potential noise effects on users of the PCNP have been considered with reference to BS8233: 2014 *Guidance on Sound Insulation and Noise Reduction for Buildings*. Noise from temporary activities has been assessed using the guidance in BS5228: 2009 *Code of Practice for Noise and Vibration Control on Construction and Open Sites*. Regard has also been had to the advice in Technical Advice Note 11: Noise (TAN 11).
63. Following the application of standard mitigation and management measures for controlling construction noise, the assessment concludes that no exceedances of the assessment criteria would be predicted at any noise sensitive receptor. Therefore, no significant noise impacts would be expected during construction. The potential for significant impacts as a result of construction traffic were also assessed and found to be negligible.
64. During testing and commissioning of the development, certain activities would have the potential to generate noise off-site over a period of approximately two weeks. These activities would be scheduled to take place during the day or evening, however in the event of unforeseen delays to scheduled daily activities commissioning may need to extend into the night. Local residents would be kept informed of planned potentially noisy commissioning activities, through the development and Valero's ongoing stakeholder engagement process. As commissioning activities would be expected to be noisy only briefly, and take place during the night only occasionally, adverse effects are not considered significant.

65. Extensive noise minimisation measures have been included in the development design to reduce noise at source during operation. For example, the combustion turbine generator would include a number of bespoke measures, including enhanced acoustic enclosures. At Rhoscrowther, a difference of up to 6dB(A) (during the day) and 7dB(A) (at night) between the representative background sound level and the level of plant noise is predicted. As background noise levels are often higher than the representative background sound level (due primarily to wind direction), this difference would normally be less than 5dB(A) (the threshold for an adverse impact). Additionally, by the time the development becomes operational, there would be just one occupied residential property in Rhoscrowther (compared to two currently). In this context of a single property, noise effects from the development are not expected to be significant.
66. At Eastington Farm, a difference of up to 2dB(A) between the representative background sound level and the level of plant noise is predicted. Taking account of the context, noise from the proposed development at this single property would not be expected to result in an adverse effect.
67. At Angle, a difference of up to (minus) -8dB(A) between the representative background sound level and the rating level is predicted. Noise from the development at this location would not be expected to result in an adverse effect.
68. Lower noise levels than those predicted at Rhoscrowther, which would not be expected to result in any significant effects, are predicted at other properties further away from the development than Rhoscrowther. Noise from the development at the PCNP is predicted to be considerably below guideline levels and whilst it may be perceptible at times, it is not expected to reduce the tranquillity of this area. It would not therefore be considered to be significant.
69. Cumulative noise effects as a result of the development are not expected. In terms of construction, the highest noise levels from the proposed development are expected to be during site preparation. During other construction phases, predicted noise levels are at least 8db(A) below the daytime criterion and are therefore unlikely to contribute to significant noise impacts at nearby properties. Should construction of the underground cable trench take place during site preparation works or during the evening, cumulative impacts are possible. However, as trenching works are expected to be relatively short-lived (one or two months), cumulative impacts are not expected to be significant.
70. During operation, the NVIA has considered the projects at Egnedol Biomass Energy Facility and South Hook Combined Heat & Power Station (which are currently in the planning process) for their potential to result in significant cumulative noise impacts. The nearest noise sensitive receptors to the proposed Egnedol facility lie in Milford Haven, approximately 3km from the proposed development. Predicted noise from the Cogen plant at these receptors is approximately 29dB(A), which is not expected to contribute to a significant impact in this urban location. The proposed South Hook project is approximately 4.5km from the proposed development with the receptors likely to be most affected by cumulative noise from the two projects are properties in Gelliswick and Angle. Predicted noise from the proposed Cogen plant is similar at both locations; approximately 26dB(A), and is therefore expected to be too low to contribute to a significant impact in either location.

Geology, Hydrology and Land Condition

71. The Geology, Hydrology and Land Condition Impact Assessment (GHLICIA) (*Document A DOC04d*) details the potential impacts on geology, hydrogeology, hydrology and land condition during the construction and operational phases of the development. Relevant guidance has been followed, including the document *Model Procedures for the Management of Land Contamination* through the assessment process.
72. The Refinery's geology and hydrogeology has been subject to extensive prior assessment and regular quality monitoring under the Environmental Permit. A site-wide conceptual model has been established and previously agreed with the regulators. There are considered to be seven hydrogeological catchments across the wider Refinery site, reflecting site topography. The development site is considered to reside in two catchments which have southerly groundwater flow directions and drain towards two unnamed, off-site streams which ultimately discharge into the Milford Haven. The bedrock underlying the site is designated as a secondary aquifer.
73. The assessment of land conditions utilised the soil data obtained from soil samples and stream water samples. A review of the chemical data indicated that there is no significant soil or groundwater contamination currently known in the vicinity of the development site, which is consistent with the known history of this part of the Refinery for support activities and not for oil storage or refining.
74. This assessment has indicated that the significance of impact ranges from 'negligible' to 'moderate' and that the employment of good industry management practices during the course of the construction and operational phases would provide sufficient mitigation in relation to the potential impacts.

Planning Policy

75. At a national level, Planning Policy Wales (PPW) and Technical Advice Notes (TANs) set out WG's policies and principles on different aspects of planning. Those of relevance here include:
 - PPW Edition 9 (November 2016)
 - TAN 5: Nature Conservation and Planning (2009)
 - TAN 11: Noise (1997)
 - TAN18: Transport (2007)
 - Welsh Government Energy Policy Statement 'A Low Carbon Transition' (March 2012)
76. At a local level, planning policy is set out in the Pembrokeshire County Council Local Development Plan (LDP), adopted in February 2013, which is reproduced in Appendix A1 of the Council's LIR (*Document Ref B DOC05*). The vision and objectives of the LDP are presented in Chapter 4 whilst Chapter 5 presents the Plan Strategy which includes strategic policies designed to deliver the vision and objectives of the Plan for sustainable development. A number of these policies are particularly relevant:

- Policy SP 1 (Sustainable Development) is an overarching strategic policy which requires all development to demonstrate how positive economic, social and environmental impacts will be achieved and adverse impacts minimised.
 - Policy SP 2 (Port and Energy Related Development) supports development for port related facilities and infrastructure in those areas that are spatially defined on the LDP Proposals Map, and includes the application site.
 - Policy SP 3 (Employment Land Requirements) which allocates strategic employment land for Classes B1, B2, B8 and other appropriate employment uses.
77. Chapter 6 of the LDP sets out detailed policies, the most relevant of which are:
- Policy GN.1 (General Development Policy) provides a criteria-based framework for evaluating impacts.
 - Policy GN.2 (Sustainable Design) provides a criteria-based framework for the evaluation of design quality.
 - Policy GN.4 (Resource Efficiency and Renewable and Low-carbon Energy Proposals) supports renewable energy schemes supplied through environmentally acceptable solutions.
 - Policy GN.37 (Protection and Enhancement of Biodiversity) requires a positive approach towards maintaining diversity and only allows development that would harm protected species or their habitats in exceptional circumstances.
 - Policy GN.38 (Protection and Enhancement of the Historic Environment) requires that any development that affects sites and landscapes of architectural and/or historic merit or archaeological importance, or their setting, will only be permitted if their character and integrity is protected or enhanced.
78. The following adopted Supplementary Planning Guidance (SPG) documents are also relevant:
- Renewable Energy SPG, which provides guidance on the assessment of the environmental effects of biomass proposals;
 - Biodiversity SPG, which provides guidance on securing sustainable development that protects and enhances biodiversity.

Consultation Responses

Natural Resources Wales (Document B REP04)

79. NRW states that its concerns in respect of European Protected Species (EPS), land contamination and construction pollution prevention can readily be resolved through planning condition if planning permission is granted. In particular, it raises concern that the application does not detail the development's lighting proposals and that a condition would be required to control light spillage and protect wildlife. In respect of land contamination, it acknowledges that no site can be completely understood and requests a condition dealing with contamination not previously identified. Additionally, it notes that the submitted Construction Environmental Management Plan (CEMP) is a higher level strategic document, and that a detailed CEMP should be submitted prior to the commencement of works.

80. Based on the evidence provided NRW does not consider that the proposal would cause substantial harm to the landscape character or visual amenity of the area. Whilst it notes that there is no consideration of cumulative impacts with other vertical structures in the locality, such as wind turbines, from the photographs provided, it considers that there are unlikely to be significant cumulative effects due to the distances involved and limited inter-visibility. There could however be some adverse visual impacts resulting from the scheme at locations close to the development, including views from Eastington Manor House, the Wales Coastal Path and Rhoscrowther village. In the interests of minimising visual impact on these sensitive locations NRW recommends that mitigation in the form of planting to the embankment and site boundary is considered to strengthen existing screen planting which is fragmented and limited in its effectiveness in places.

Wales and West Utilities (Document Ref B REP02)

81. Wales & West Utilities has no apparatus in the area of the enquiry. However gas pipes owned by other utilities providers or privately owned may be present in this area.

NHS Wales Hywel Dda University Health Board (Document Ref B REP06)

82. Provided appropriate management and controls were in place, it is felt that construction works would not adversely impact on human health. However it retains some concern over subsequent operation, specifically in respect of potential impacts from noise and odour.

Health and Safety Executive (Document Ref B REP05)

83. The proposed development would be on an existing major hazard site. The Valero Energy Limited's Pembroke Refinery is an existing Upper Tier establishment as defined by the Control of Major Accident Hazards Regulations 2015. As such the applicant should consider whether the development of the proposed cogeneration facility could have significant consequences for major accident hazards and therefore they may need to submit a modification to the Safety Report under Regulation 10(2)(d).
84. The applicant also needs to consider whether the proposed development requires a new hazardous substances consent and/or whether extant hazardous substances consent(s) need to be varied.
85. It may be beneficial for the applicant to undertake a risk assessment as early as possible (using external expertise if necessary) to satisfy themselves that their design and operation would meet the requirements of relevant health and safety legislation as the project progresses.

Other Responses (Document Ref's B REP01 and B SUP01)

86. The members of Pembroke Dock Town Council fully support the development which aims to reduce the environmental impact and would give a welcomed boost to the area with the use of local contracting firms.
87. Representations on behalf of St Decumanus Church, Rhoscrowther accept that the proposed development would have only a negligible worsening visual effect on the

church, but raise concern that St Decumanus is variously described in the paperwork as Grade II, Grade II* and Grade I, when it is in fact the latter.

Local Impact Report (Document Ref B DOC05)

88. Pembrokeshire County Council's LIR presents its assessment on a number of matters, particularly transportation, pollution, landscape and visual impacts, nature conservation, and social and economic effects. It also includes suggested planning conditions should permission be granted. The main points are summarised below.

Transportation

89. The proposal would have a marginal effect on local traffic levels during the construction period. The operational effects of the proposal, and its cumulative effects particularly with the existing Refinery operations, would result in no adverse impact on the local transportation network and related accessibility. It would therefore accord with policy GN.1 in respect of the relevant criteria relating to transportation.

Pollution

90. A number of factors have been considered including the proximity of nearby sensitive properties including at Rhoscrowther, sound output of plant and equipment, and suitable methods of mitigation as well as baseline noise monitoring. The revised Noise Assessment (June 2017) submitted in support of the application indicates that there would not be a significant adverse impact for residential locations at Rhoscrowther and Eastington Farm.
91. PCC has reviewed the application in relation to construction noise and vibration impacts as well as dust control during the construction phase and does not consider that these elements represent significant areas of concern.
92. The operational phase would be subject to the Environmental Permit regulated by Natural Resources Wales. This permit would have conditions that cover aspects of operational noise, atmospheric emissions, groundwater emission and contaminated land. With such control during operation, environmental effects would not be expected to be significant.
93. Subject to control to be exercised by way of the proposed CEMP, significant environmental effects during the construction phase are not expected.
94. In respect of Policy GN.1 criterion 7 (which requires new development to not cause or result in unacceptable harm to health and safety), it is unclear as to whether there would need to be any modification of the existing Hazardous Substances Consent and/or Control of Major Accident Hazards (COMAH) designation. It is assumed that the Health and Safety Executive have been consulted on the application.

Visual & Landscape

95. PCC considers that the LVIA has been undertaken in a thorough manner with the methodology described in detail. The scheme benefits from being largely of a similar type as existing infrastructure, i.e. being a large scale industrial plant, and in general terms comprised of components of an equal or smaller scale. The southern perimeter of the scheme is comprised of a structural landscape bund of some maturity and this would not be breached and therefore offers a mature landscape mitigation treatment

on what is otherwise its most sensitive boundary facing into the rural farmland and towards the PCNP.

96. PCC are in agreement with the LVIA conclusions that the landscape and visual impacts would not be significant. Cumulative effects have been considered and it is anticipated that the project would be unlikely to contribute to adverse cumulative visual effects. There would be no adverse effect on the PCNP. The proposal would accord with LDP Policies GN.1 and GN.2.

Nature Conservation

97. The application includes sufficient information to enable the Competent Authority to determine whether an appropriate assessment is required under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended). The main nature conservation issues are the potential impact of air pollutants on designated sites and the potential impact on bats. PCC is satisfied with the conclusion of the assessments included with the application and agree that there would be no likely significant effects. It is not considered that an AA is required.
98. With regards to effects on bats, an EPS licence was recently approved for the exclusion of bats, including lesser horseshoe bats, from the existing electrical substation. Mitigation was provided in a nearby house in Rhoscrowther and bats are not therefore considered further.
99. Surveys indicate levels of activity along the south west landscaped area and plantation woodland by various species of bat. There are known roosts nearby and bats are present throughout the year. However this activity continues with existing levels of noise and vibration and the proposal would be unlikely to contribute further to these levels. Furthermore the proposed works would not affect vegetation and, as such, the bats would be likely to continue to use the embankment.
100. The proposal may result in an increase in lighting during construction and operation. In respect of the construction phase, the submitted CEMP provides insufficient information and precision in this respect. It is recommended that the prior approval of external lighting details should be subject to a planning condition.
101. The proposal would accord with policy GN.1 and GN.37 as well as the Biodiversity SPG.

Historic Environment

102. The SoCG addresses the potential effects on the Registered Historic Landscape, relevant Historic Landscape Character Areas (HLCA), archaeology, cultural heritage and the scheduled ancient monument (SAM) at Eastington Manor (also Grade 1 listed). PCC concurs with the SoCG that there would be "*no significant effects on cultural heritage during operation of the Project*"; "*During construction, the Project is predicted to result in a minor magnitude of impact, and a slight significance of effect*" and "*It is agreed there will be a minor impact on the setting of the scheduled monument and Grade I Listed Eastington Manor*". The setting of the listed buildings within Rhoscrowther would not be adversely affected. Archaeological remains are likely to have been totally removed as a result of long-term presence of the Refinery across the footprint of the Project.

103. Due to the minor negative effect in respect of the historic environment, the proposal is not technically compliant with policy GN.38 because this policy is not tolerant of harm to an historic asset even when such harm is very limited as in this case.

Social and Economic Impacts

104. Pembrokeshire's economy has three main pillars: energy, agriculture and tourism. The county is surrounded on three sides by sea and is blessed with a fine deepwater harbour that is home to the UK's third busiest port. This has enabled the energy industry to develop around the Haven Waterway. It is currently estimated that up to a quarter of the UK's energy can be supplied via Pembrokeshire; this is a combination of refined oil products, gas and electricity.
105. Valero's Pembroke Refinery is important to the local, regional and national economies. It is the only Refinery in Wales and one of only six remaining refineries in the UK. The Refinery is set up to handle some of the more unusual types of crude oil enabling it to process many sour crudes which other UK refineries are unable to process. Valero is one of three or four of the largest exporters in Wales and one of, if not the largest, private sector employer in Pembrokeshire. The workforce is highly skilled and the salaries paid are above the local and regional averages. Productivity in the Refinery is high in a region where GDP is significantly below the national average. The Refinery supports a network of sophisticated and specialist supply chain companies, who also pay wages above the local average. In addition to the direct workforce many other local jobs are dependent upon the Refinery.
106. There is therefore the potential for positive social and economic effects which would accord with the objectives of LDP Policy SP 1.

Statements of Common Ground

Pembrokeshire Coast National Park Authority (Document Ref A DOC06a)

107. PCNPA agrees the following matters:
- Landscape and Visual - The project would not cause substantial visual harm to the landscape character nor to the visual amenity within the study area, the PCNP or Angle Bay. It also concludes that the residual landscape and visual impacts would not be significant.
 - Historic Environment – There would be no effect on the historic environment of the PCNP as a result of the construction and operation of the proposal.
 - Air Quality - The construction of the project would not have a significant impact at sensitive human or ecological receptors within the PCNP. Whilst it is agreed that the operation of the Cogen plant would result in a small increase in Nitrogen Oxides (NOx) emissions this is not predicted to cause any significant impacts to human receptors within the PCNP. No likely significant effects are predicted on ecological receptors or designated sites that comprise the PCNP.
 - Noise - There would be no significant impacts from the development resulting from the noise from construction, commissioning or operation on the PCNP.
108. There are no matters not agreed or under discussion.

Cadw (Document Ref A DOC06b)

109. Cadw agrees the following matters:

- In terms of the LVIA there would be no direct physical impact on any designated sites of national importance in the study area and the project would not have an impact on the Registered Historic Landscape.
- The proposed development is sited appropriately and would not have an impact on the Texaco Oil Refinery and BP Jetty HLCA or the Registered Milford Haven Waterways LOHI.
- There would be no impact on any surrounding archaeological remains and historic landscape.
- There would be no significant effects on cultural heritage during operation of the development.
- During construction, the development is predicted to result in a minor magnitude of impact, and a slight significance of effect. It is agreed there would be a minor impact on the setting of the scheduled monument and Grade I Listed Eastington Manor during this period.

110. There are no matters not agreed or under discussion.

Natural Resources Wales (Document Ref A DOC06d)

111. NRW agrees the following matters:

- In terms of the Geological, Hydrogeological, Hydrological and Land Condition Assessment, there would be no significant soil or groundwater contamination currently in the vicinity of the Project site.
- Due to the fractured nature of the bedrock there is the potential for impact on the groundwater via mobilisation of shallow soil contamination therefore construction works would be designed in such a way as to minimise the potential for surface run off which could impact watercourses (either chemically or physically).
- The construction phase of the works would be contained within the Refinery, therefore no offsite monitoring of surface or groundwater quality would be necessary.
- Only minor or negligible impacts are identified from either the construction or operation of the Project.
- Conditions to deal with unforeseen land contamination and the submission of a CEMP are necessary.
- In terms of the HRA, there would be no likely significant effects on the qualifying interest features of the European sites from the Project alone, or in-combination with other projects. In relation to EPS a condition is necessary relating to the control of external lighting for the protection of bats.
- There is no potential effect on the SSSI citation interest features of all the SSSIs from the Project alone or in combination with other projects.

- Noise effects fall within the remit of Industrial Permitting. NRW is in the process of reviewing the Environmental Permit (EP) variation application but is unable to provide any binding commitments at this stage as to the subsequent determination of the application, and it should be noted that consent may be granted or refused.

112. There are no matters not agreed or under discussion.

Pembrokeshire County Council (Document Ref A DOC06c)

113. PCC agrees the following matters:

- Landscape and Visual - The development does not cause substantial visual harm to the landscape character nor to the visual amenity within the study area, and the impacts on the residual landscape and visual receptors from the development are not significant.
- Cultural Heritage – Having regard to the LVIA there would be no direct physical impact on any designated sites of national importance in the study area and the project would not have an impact on the Registered Historic Landscape. The proposed development would be sited appropriately and would not have an impact on the Texaco Oil Refinery and BP Jetty Historic Landscape Character Area of the Registered Milford Haven Waterways LOHI. There would be no impact on any surrounding archaeological remains and historic landscape. There would be no significant effects on cultural heritage during operation of the development. There would be a minor impact on the Grade I Listed Eastington Manor during construction.
- Air Quality – There would be no significant impacts associated with construction traffic. In terms of the operation of the development, there are predicted to be no significant impacts on sensitive human receptors. This includes receptors within the AQMA's, including cumulative effects. Emission limits would be contained in a varied Environmental Permit, issued and regulated by Natural Resources Wales.
- Noise - There would be no significant noise impacts expected during the construction of the project or as a result of construction traffic. The conclusions on noise impacts during construction are predicated on an appropriate Construction Environmental Management Plan (CEMP) being in place. There would be no significant adverse noise impacts expected during the commissioning of the project. Noise effects from operation of the project are not expected to be significant at Rhoscrowther or to result in an adverse effect at Eastington Farm, Angle or any sensitive receptors further from the project. Cumulative noise effects from operation of the project and the other schemes identified in the NVIA would not be significant.
- Ecology - There would be no potential effect on the SSSI citation interest features of all the affected SSSIs either from the Project alone or in combination with other projects. Due to the small overall contribution to nitrogen deposition, no significant residual impact arising from air quality would be anticipated for ancient woodlands. There would be no impact on the habitats within the site and immediate vicinity. The impact on species and species groups including badgers, bats and birds during construction and operation would not be significant provided an appropriate CEMP was in place. There would be no significant residual impacts on ecological features due to the construction or operation of the Project. The identified ecosystems and

their component parts identified within the project either would not be affected, or are resilient to disturbance, resist damage, and if damaged would recover quickly.

- Geological, Hydrogeological, Hydrological and Land Condition Assessment – There is no significant soil or groundwater contamination currently in the vicinity of the project site. Generic safe working practices would need to be applied to mitigate against potential impacts on human health receptors during the development. Whilst the assessment of the existing data in relation to soils and groundwater in the vicinity of the project site does not indicate the presence of significant contamination, it is agreed that protocols should be put in place to mitigate the effects on site workers from unexpected hazardous substances which could potentially be encountered within soils and waters at the project site. Due to the fractured nature of the bedrock there is the potential for impact on the groundwater via mobilisation of shallow soil contamination, and construction works would be designed in such a way as to minimise the potential for surface run off which could impact watercourses (either chemically or physically). The construction phase of the works would be contained within the Refinery site, therefore no offsite monitoring of surface or groundwater quality would be necessary. Only minor or negligible impacts are identified from either the construction or operation of the project.
- Transport - The project would have a marginal impact on the local traffic levels during the construction period. All abnormal loads would be brought in by sea utilising the Valero materials offloading facility, therefore there would be no adverse impact on the surrounding highway network as a result of abnormal load transportation. There would be no cumulative impact as a result of the project in terms of highways and transport.

114. There are no matters not agreed or under discussion.

Appraisal / Main Issues

115. In light of the foregoing, I consider the main issues to be:

- The effect of the proposed development on the character and appearance of the surrounding area, including whether it would preserve or enhance heritage assets¹.
- The impact of the development on ecology, highway safety, air quality, noise and land conditions.

Principle of Development

116. Planning policies at national and local level are consistent in their aim to achieve sustainable development and development that does not cause any significant adverse environmental impacts. Overall, development is supported that is appropriate to its context in terms of design and scale and that meets the well-being objectives established within PPW.

117. The development meets a number of sustainable development objectives; it is sited on brownfield land and would provide construction employment opportunities during the 1½-2 year construction period. Whilst operationally the development itself would not generate new employment, it would support existing jobs within the Refinery. The £100 million investment would also have benefits to the immediate and wider economy.

118. The development represents a high efficiency method of generating electricity. The use of the steam by-product elsewhere within the Refinery operations would also meet energy efficiency and carbon reduction aims. It would therefore be consistent with the aims of LDP Policies SP 1 and GN.4 which encourage the optimisation of energy efficiency and low carbon development and with the objectives of Policies SP 2 and SP 3 to encourage growth in energy related development in the Waterway area. It would also accord with the general principles outlined in the Renewable Energy SPG of balancing the benefits that renewable energy development can bring against the need to protect the natural and historic environment.

Character and Appearance

119. The development would be located within the boundary of the existing, long-established Refinery. Development within the Refinery is typified by infrastructure and buildings, such as large chimneys, plant and significant areas of over ground pipeline racks.

120. The design of the development is appropriate to its context, set amongst the established Refinery and infrastructure most of which is of a considerably larger scale than that proposed. It would be wholly consistent with the established character of the site.

¹ Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires that in considering whether to grant planning permission for development which affects a listed building or its setting, special regard must be had to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

121. However, in addition to the local industrial landscape featuring a power station, refineries and petrochemical facilities, it also includes sensitive receptors such as the PCNP, SAM's and Listed Buildings.
122. The submitted LVIA is a useful means by which the visual impact of the development can be considered in a reliable way. As confirmed by the Viewpoint Photomontages in the LVIA, and observed at my site visit, I consider that the proposed stack would have one of the greatest impacts in terms of views from outside the site. Whilst it would be a notable feature, the existing Refinery structures are prominent in the landscape, both in terms of their vertical elements (including stacks rising to some 170 metres in height) and the considerable scale and footprint of the constituent parts. The proposed stack, and what could be seen of the associated structures, would thus be read as modest additions to the existing industrial landscape.
123. It is from Rhoscrowther Village and Eastington Farm that various components of the development would be most visible at close range. Nevertheless, it would be largely screened by the embankment and belt of dense vegetation, which I consider to be adequate in the context of the existing use and structures within the Refinery site.
124. From wider views across the bay, such as at Milford Haven or Angle, the development would be barely perceptible given the considerable separation distances and topography. In any event, it would be read against the backdrop of the existing infrastructure at the site.
125. I note the concerns of NRW that there has been no consideration of cumulative impacts with other vertical structures in the locality, such as wind turbines. However, based on my site visits, I share its view that there are unlikely to be significant cumulative effects due to the distances involved and limited inter-visibility.
126. In this context, the landscape and visual impacts would not be significant and the development would be absorbed into the landscape as a modest modification to existing operations in keeping with the established land use.
127. Consequently, the development would accord with LDP Policy GN.2 which seeks to ensure that new development is of a good design which pays due regard to local distinctiveness and is appropriate to the local character and landscape context. It would also meet the aims of LDP Policy GN.1 to ensure that the nature, location, siting and scale of the proposed development is compatible with the capacity and character of the site and its surroundings, would not result in a significant detrimental visual impact or adversely affect landscape character, quality or diversity.

Heritage

128. None of the heritage assets identified in the CHIA are within the application site or within the boundary of the Refinery. However, Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires that in considering whether to grant planning permission for development which affects a listed building or its setting, special regard must be had to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.
129. National planning policy contains tests in relation to the desirability of preserving SAM's and their settings. It states that when considering development that affects SAM's there should be a presumption in favour of their physical preservation in situ

and against proposals which would have a significant impact on the setting of visible remains.

130. The CHIA found that the development would impact on only one heritage asset, Eastington Manor (Grade 1 Listed Building and SAM). It concludes that the development would result in a 'slight change' to the setting of the heritage asset due to the introduction of a 35 metre high stack into the view from the Manor to the north, as well as the noise and movement from the plant and cranes required during construction.
131. Nevertheless, this view already includes Refinery infrastructure including two existing large water tanks that lie in relatively close proximity and substantial stacks which are clearly visible. The development would be of a modern, utilitarian design which would reflect the appearance of the existing structures in the Refinery. It would be no more dominant or prominent in relation to Eastington Manor than that which already exists. Any impacts arising from construction, such as cranes or machinery, would be of a temporary nature only.
132. Consequently, the settings of the Listed Building and SAM would be preserved consistent with the requirements of the 1990 PLBCA Act and national planning policy. The development would also meet the overall aims of Policy GN.38 which requires development that affects sites and landscapes of architectural and/or historical merit or archaeological importance, or their setting, to demonstrate that their character and integrity would be protected.

Ecology

133. The key principle in any new development proposal is to protect and enhance biodiversity. This is supported at national planning policy level within PPW and at the local level in LDP Policies SP 1, GN.1, GN.3 and GN.37, the Biodiversity SPG and the Local Biodiversity Action Plan.
134. LDP Policy GN.37 requires that all development demonstrates a "*positive approach to maintaining and, wherever possible, enhancing biodiversity*". It states that "*Development that would disturb or otherwise harm protected species or their habitats, sites or features of importance to wildlife and individual species, will only be permitted in exceptional circumstances where the effects are minimised or mitigated through careful design, work scheduling or other appropriate measures*".
135. The supporting text to Policy GN.37 establishes that development that is likely to have a significant effect on a European site or species should be subject to an Appropriate Assessment. It also recognises that adverse effects may include disruption to species and habitats prior to, during and/or after construction, or the cumulative impacts of a development for example causing significant noise, lighting or traffic impacts.
136. Based on the submitted EcIA, there are likely to be no significant effects on European designated sites as a result of the development.
137. In terms of SSSI's either the relevant criteria are either not exceeded or scoped out of requiring further assessment. Whilst there are 7 ancient woodland sites within 2km of the project site, sulphur dioxide emissions, NOx concentrations and acid deposition

are either 'not significant' or 'unlikely significant'. No significant residual impacts are thus anticipated.

138. In respect of habitats, the residual impact of the loss of semi-improved neutral grassland, ruderal vegetation, short perennial vegetation, buildings and bare ground would not be significant. Neither are there any significant impacts predicted on bats, birds or badgers.
139. In order to avoid adverse impacts, the CEMP proposes a series of mitigation measure during the construction phase. Relevant measures include a 30 metre construction buffer zone to be applied to any Badger Setts together with a 100 metre percussive type piling buffer zone for the duration of the construction phase. In order to minimise the risk of adverse impacts on nesting birds, their nests, young and/or eggs, activities that may cause these impacts would avoid the nesting bird season (between mid-March to the end of September).
140. No mitigation is required during the operational phase of the development.
141. With the implementation of the proposed mitigation measures and the conclusion within the EcIA that there are no significant impacts on ecological features, the proposed development would meet the requirements of TAN5 and with LDP Policies GN.1 and GN.37 which require new development to respect and protect the natural environment including protected habitats and species. It would also accord with the aims of the Biodiversity SPG to ensure sustainable development which does not result in adverse impacts on species and habitats.
142. The Conservation of Habitats and Species Regulations 2010 enable the protection of areas that host certain important habitats and species. Any application for works within or adjacent to a European site will be subject to the provisions of The Conservation of Habitats and Species Regulations 2010.
143. Article 61 of The Conservation of Habitats and Species Regulations directs that a competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which is likely to have a significant effect on a European site (either alone or in combination with other plans or projects), make an appropriate assessment of the implications for that site in view of that site's conservation objectives.
144. In this particular case, the nature conservation interests are concerned with the potential impacts of air pollution on the specified sites and the impacts on bats. In assessing the proposal, and based on the conclusions of the applicant's HRA report, I conclude that there would be no likely significant effects on the qualifying interest features of the European sites from the development alone or in-combination with other projects. Hence I consider that an AA is not necessary.

Traffic and Highway Safety

145. The construction phase of the development would inevitably result in additional traffic movements and personnel travelling to and from the site. The TA has found that, in comparison to the Refinery shutdown/turn around periods, construction worker and heavy goods vehicle traffic movements would be low and for the temporary construction period only. Abnormal loads would be delivered to the Refinery by boat

utilising the existing heavy lift wharf, and therefore road traffic and transportation impacts would be largely avoided in this regard.

146. The submission includes a Traffic Management Plan, the purpose of which is to explain how the transport impact would be minimised during the construction period. The majority of the construction traffic travelling to and from the Refinery would utilise an existing HGV route from the A477. During peak construction, the additional personnel demand for parking would be met by the existing car parks and public road access.
147. In this context, and whilst it is evident that there would be some increase in demand for parking facilities and use of public roads, these would be short term impacts only and there is sufficient capacity within the highway network to accommodate the demands.
148. The TA has concluded that once the development was operational there would be no increase in numbers of Refinery personnel and no change in the number of staff vehicles or parking provision on-site. Consequently, no additional highway impact would be likely post construction.
149. The proposal would accord with LDP Policy GN.1 insofar as it would be in an accessible location, incorporate sustainable transport and accessibility principles and would not result in traffic exceeding the capacity of the highway network. Necessary and appropriate service infrastructure, access and parking would also be provided. It would not therefore result in a detrimental impact on highway safety.

Air Quality

150. The potential for air quality impacts to sensitive human health and ecological receptors have been fully considered. The assessment has identified that there are no significant impacts associated with construction traffic.
151. Whilst potentially significant impacts were identified associated with construction dust, the implementation of suitable mitigation measures would ensure these impacts would be no worse than minor, if not negligible.
152. In terms of the operation of the Project, it is predicted there would be no significant impacts on sensitive human receptors. This includes receptors within the AQMA's.
153. Whilst the development would generate energy from gas, it is a high efficiency method of generating electricity and would therefore be in line with government policy for the reduction CO2 emissions from the power generation sector. Taking the above into consideration, the development would meet the requirements of LDP Policies GN.1, GN.4 and GN.37 which seek to protect against adverse air quality impacts.

Noise and Vibration

154. An initial estimate of up to 6dB(A) (during the day) and 7dB(A) (at night) above existing noise levels was predicted at the closest noise sensitive receptors (residential properties within Rhoscrowther). Receptors at Eastington Farm and Angle were also considered, although impacts at Rhoscrowther represent a worst case scenario.
155. However, a number of factors are relevant to the context of noise from the proposed development in Rhoscrowther which indicate that the significance of noise effects

would be expected to be lower than the initial estimate. That is, due to the variation of the background noise level for more than half of the time, the exceedance of rating level over background sound level is predicted to be 5dB(A) or less, i.e. at or below the threshold for an adverse impact. In addition, the representative background sound level occurs largely when receivers are upwind of the Refinery, whereas the predicted noise modelled for the proposed development assumes receptors are downwind. This results in a conservative estimate of the actual likely level of noise impact.

156. Taking these and other contextual factors into account, and that there would be just one occupied residential property in Rhoscrowther when the development would become operational, the resultant noise impacts are not expected to be significant. Other receptors at Eastington Farm, Angle, isolated noise sensitive receptors further from the development and in the PCNP would not be expected to experience adverse impacts as a result of the proposed development.
157. Neither would cumulative noise effects be expected as a result of the development in combination with other developments. Predicted noise from the proposed Cogen plant is similar at both locations, and is therefore expected to be too low to contribute to a significant impact at either location.
158. Whilst I acknowledge the Health Board's concerns specifically in respect of potential impacts from noise when the development is operational, there is no substantive evidence before me that such impacts would be of a magnitude to represent a significant adverse effect. Furthermore, this is a matter that would also be subject to further controls under the Environmental Permitting regime.
159. Consequently the proposal would not result in a detrimental impact on local amenity in terms of noise or vibration, and would therefore meet the requirements of LDP Policies GN.1 and GN.3 and with TAN 11.

Geology, Hydrology and Land Condition

160. The submitted GHLCIA reasonably considers the risks of land contamination and the risks to controlled waters. There is no significant soil or groundwater contamination currently known in the vicinity of the development site. Thus, the employment of good management practices during the course of the construction and operational phases would provide proportionate mitigation in relation to the potential impacts.
161. Be that as it may, I note NRW's concern that given the size/complexity of the site, it is possible that there may be unidentified areas of contamination that could pose a risk to controlled waters if not remediated. I concur that no site can be completely understood, but that the potential risk could be adequately dealt with by condition in the event of planning permission being granted.
162. In this context, the development would meet the aims of LDP Policy GN.1 to ensure new development would not cause or result in unacceptable harm to health and safety.

Other Matters

163. I have considered the duty to improve the economic, social, environmental and cultural well-being of Wales, in accordance with the sustainable development

principle, under section 3 of the Well-Being of Future Generations (Wales) Act 2015 ("the WCFG Act"). In reaching my conclusions, I have taken into account the ways of working set out at section 5 of the WCFG Act and I consider that my overall conclusions are in accordance with the sustainable development principle through its contribution towards one or more of the Welsh Ministers well-being objectives set out as required by section 8 of the WCFG Act.

Conditions and Obligations

164. The development does not give rise to any significant adverse effects that would warrant off-site mitigation to be secured via a planning obligation. As a result, PCC has not suggested that any obligation would be necessary, nor have I drawn any other conclusions in this regard.
165. A set of suggested conditions was submitted by the Council in its LIR (*Document Ref B DOC05*). I have had regard to the suggested conditions and whether they meet the tests outlined in WG Circular 016/2014 '*The Use of Conditions for Development Management*'.
166. Where appropriate I have amended several of the suggested conditions for improved clarity and added other necessary conditions, and the recommended set is now included as an Annex to this report.
167. In accordance with the provisions of Section 91 of the 1990 Act, the standard condition specifying a time limit for the commencement of development is recommended. A condition requiring the development to be completed in accordance with the approved plans would be necessary in the interests of clarity.
168. The Council's suggested wording in respect of the CEMP requires that the development shall be carried out entirely in accordance with the submitted document. However, NRW has suggested in its consultation response and its SoCG that a detailed CEMP should be submitted prior to the commencement of works in order to avoid pollution of controlled waters and protect ecology. The CEMP does, in fact, identify as a high a strategic level document and states that its detail would be further developed prior to commencement on site. I have therefore amended the suggested wording of the Council's condition, so as to require the submission of a fully detailed CEMP in order to avoid, minimise or mitigate construction effects on the environment and surrounding community. Such a condition would be necessary to ensure appropriate measures are fully implemented.
169. A further condition requiring a remediation strategy in the event of contamination not previously identified being found to be present at the site would also be necessary in the interests of public protection and safety.
170. Finally, a condition requiring details of external lighting during both the construction and operation of the development would be necessary and entirely reasonable so as to control light spillage and protect wildlife.

Summary of Conclusions

171. My overall conclusion is that the proposed development would be suitably located and would be an appropriate development which would bring with it a range of economic, social and environmental benefits and would have no significant adverse impact on

landscape and visual impact, heritage assets, ecology, highway safety or land conditions. It would meet the requirements of development plan policies and national planning policy in regard to these matters.

172. In addition to considering any minor adverse effects, such as that arising from noise, I consider these matters should be balanced with the wider benefits of the proposed development in terms of investment and energy efficiency, as well as employment. I also note from the submitted Statements of Common Ground with PCC, PCNPA, Cadw and NRW that there is agreement on all matters and there are no issues in dispute. In this context, I conclude that the development would reflect the principles of sustainable development promoted through PPW and the WCFG Act.

Recommendation

173. That planning permission be granted, subject to the conditions attached at Annex A.

Melissa Hall

Inspector

Documents**Document Ref A List**

DOC01a	Index and Application Forms
DOC02	Non-Technical Summary (Cogen/DNS/NTS/B01)
DOC03a	Planning Statement (Cogen/DNS/PS/B01)
DOC03b	Design and Access Statement (Cogen/DNS/DAS/B01)
DOC03c	Pre-Application Consultation Report (Cogen/DNS/PAC/A01)
DOC03d	Planning Drawings (Cogen/DNS/DWG/B01)
DOC04a	Air Quality Impact Assessment (Cogen/DNS/AQIA/C01)
DOC04b	Cultural Heritage Impact Assessment (Cogen/DNS/Arch/B01)
DOC04c	Ecological Impact Assessment (Cogen/DNS/EcIA/C01)
DOC04d	Geological, Hydrogeological, Hydrological and Land Condition Impact Assessment (Cogen/DNS/Geo/B01)
DOC04e	Habitat Regulations Assessment (Cogen/DNS/HRA/C01)
DOC04f	Landscape and Visual Impact Assessment (Cogen/DNS/LVIA/B01)
DOC04g	Noise and Vibration Impact Assessment (Cogen/DNS/Noise/B01)
DOC04h	Transport Assessment
DOC05a	Construction Environmental Management Plan (Cogen/DNS/CEMP/B01)
DOC05b	Traffic Management Plan
DOC06a	Pembrokeshire Coast National Park Authority Statement of Common Ground
DOC06b	Cadw Statement of Common Ground
DOC06c	Pembrokeshire County Council Statement of Common Ground
DOC06d	Natural Resources Wales Statement of Common Ground

Document Ref B List

DOC05	Pembrokeshire County Council's Local Impact Report
REP01	Consultation Response St Decumanus Church
REP02	Consultation Response Wales & West Utilities
REP03	Consultation Response Pembrokeshire Coast National Park Authority

REP04	Consultation Response Natural Resources Wales
REP05	Consultation Response Health and Safety Executive
REP06	Consultation Response Publish Health at Hywel Dda University Health Board
SUP01	Consultation Response Pembroke Dock Town Council
SUP02	Consultation Response Letter of Support from Resident

Plans

Cogen/DNS/DWG/01/A01	Site Location Plan
Cogen/DNS/DWG/002/A01	Plan View of WPD Compound New Site Layout Plan
Cogen/DNS/DWG/003/B01	Existing Site Layout Plan
Cogen/DNS/DWG/004/B01	New Site Layout Plan
Cogen/DNS/DWG/005/B01	Elevation (existing and proposed) – North
Cogen/DNS/DWG/006/B01	Elevation (existing and proposed) – West
Cogen/DNS/DWG/007/A01	View South on WPD Compound New Site Layout Plan
Cogen/DNS/DWG/008/B01	Section – North
Cogen/DNS/DWG/009/B01	Section – West

Annex A

Recommended conditions in the event of planning permission being granted:

1. The development shall begin not later than five years from the date of this decision.
2. The development shall be carried out in accordance with the following approved plans:
 - Site Location Plan, Cogen/DNS/DWG/01/A01.
 - Plan View of WPD Compound New Site Layout Plan, Cogen/DNS/DWG/002/A01.
 - Existing Site Layout Plan, Cogen/DNS/DWG/003/B01.
 - New Site Layout Plan, Cogen/DNS/DWG/004/B01.
 - Elevation (existing and proposed) – North, Cogen/DNS/DWG/005/B01.
 - Elevation (existing and proposed) – West, Cogen/DNS/DWG/006/B01.
 - View South on WPD Compound New Site Layout Plan, Cogen/DNS/DWG/007/A01.

- Section – North, Cogen/DNS/DWG/008/B01.
 - Section – West, Cogen/DNS/DWG/009/B01.
3. Prior to the commencement of works a fully detailed Construction Environmental Management Plan based on the principles outlined in the submitted Construction Environmental Management Plan (Doc Ref: Cogen/DNS/CEMP/B01) shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in strict accordance with the Construction Environmental Management Plan approved pursuant to this condition.
 4. Prior to any external lighting being installed, details of any external lighting during both the construction and operation of the development, that shall include measures to control light spillage and protect wildlife, shall be submitted to, and approved in writing by, the local planning authority. The development shall be carried out in accordance with the approved details.
 5. If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.