

Ein cyf/Our ref: CAS-235328-W3G6
Eich cyf/Your ref: Project Dragon

Lanzatech Consultation Team
c/o Turleys
18 Windsor Place
Cardiff
CF10 3BY

Dyddiad/Date: 04 October 2023

Annwyl Syr/Madam/Dear Sir/Madam,

**STATUTORY PRE-APPLICATION CONSULTATION – TOWN AND COUNTRY
PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (WALES) ORDER 2012 AS
AMENDED**

BWRIAD/PROPOSAL: Demolition of existing structures and erection of a Sustainable Aviation Fuel (SAF) production facility, including enclosed ground flare, storage tanks, installation of pipework and electrical, processing and utility equipment, administration, warehouse and laboratory buildings, new access, car parking and transport infrastructure including a truck loading area and associated works, hard and soft landscaping, areas for temporary construction laydown, and associated development.

LLEOLIAD/LOCATION: Phoenix Wharf, Port Talbot, Neath Port Talbot SA13 1RE

Thank you for providing a requisite notice to us under Article 2D of the above Order.

We have concerns with the application as proposed because inadequate information has been provided. To overcome these concerns, you should provide further information in your planning application regarding Marine, Protected Species, Air Quality and Noise. If this information is not provided, we may object to the planning application when formally consulted by the planning authority. Further details are provided below.

We also advise that based on the information submitted to date, we would ask the planning authority to include conditions regarding Contaminated Land. Without the inclusion of these conditions by the planning authority we would be likely to object to the planning application.

Marine

Physical Processes

Physical Processes have been scoped out; they are not described in any way. Until a baseline description for physical processes is presented, it is not possible to agree with the conclusions in the marine ecology chapter 13 to rule out loss or damage to habitats from changes in physical processes.

Scoping Report section 13.22 - We cannot agree with the conclusion that there will be no long term changes to hydrodynamics or wave patterns caused by the new jetty until a baseline description of the physical processes of the old dock area and location/size of the proposed jetty is presented in the first instance and an assessment carried out to determine alteration to the prevailing flow patterns (if any), the wave approach and any change to the bedload sediment transport.

There is a requirement for Physical Processes Baseline understanding of Old Port Talbot Docks - Impacts on habitats and species from a deterioration in water quality from increase in salt water intrusion

We note that the proposed jetty works and bank stabilisation are located in a land-locked area of the old Port Talbot dock which is accessed through lock gates to the south west of the site. It is also noted that the old dock area is predominantly fresh water with infrequent saline intrusion when the lock gates are opened to allow the passage of vessels into the dock.

An assessment should be carried out to determine whether the proposed works will lead to an increase in ship activity in the old dock area and lead to a requirement for more frequent opening of the lock gates, which if more frequently opened, will increase the amount of saltwater intrusion and potentially alter the freshwater/saltwater balance. A change from freshwater to saltwater over time will potentially affect ecology.

Marine Water Quality and WFD

We note that WFD is currently at the 'scoping' stage and has not been provided. We therefore cannot provide comment at this time.

Paragraph 2.15 of the Non-technical summary states that the wastewater will be discharged via a discharge pipe and this will require a licence from NRW which will ensure the necessary conditions to ensure no pollution events occur. We note that it is possible to specify a mixing zone within which it is possible to breach the Environmental Quality Standard. If this is the case, the discharge and resulting mixing zone should be included in the ES. We note, however, that 'outputs from the WFD assessment' (*para 1.23*) will be reflected in the ES.

Chapter 4 Development specification, Table 4.1, pp 4.9 - The 'treated effluent water' row indicates there will be a new discharge point. However, this does not appear to be shown on the Proposed Site and Plot Plans. We request the applicant clarify where this asset will be built and whether it will be included in the marine licence.

Chapter 13 Marine Ecology, para 13.14 - This paragraph states ‘the habitat that would be lost within the footprint of the piles, or within the area contained by the sheet piles and backfill, is not afforded protection under UK or EU legislation’ is not true as would be covered under WFD regs. Within the WFD assessment the footprint of the area should be considered and if significant compared to water body size (see guidance in Clearing the Waters for All), the potential for deterioration of the Infaunal Quality Index (IQI) element should be assessed (*though please note the Benthic Ecology Comments below*).

Chapter 13 Marine Ecology, para 13.22 - Please note that the WFD regulations include fish and, as such, should be included in this list.

Benthic Ecology

We have no specific concerns regarding impacts on marine benthic habitats given the freshwater habitat within the dock. Any biosecurity issues will likely be addressed with standard Construction Environmental Management Plans (CEMPs) and within the marine licence application.

Marine Mammals

Chapter 13 – Marine ecology (13.18 and 13.19): We acknowledge the additional information supplied in paras 13.18 and 13.19. Given that “*Port Talbot Docks are isolated from the wider marine environment via a series of lock gates*”, and the absence of any publicly available record of marine mammals within the docks, we agree with the conclusion that “*no significant effects are considered likely, and the decision to scope marine mammals out*”.

Appendix 13.1 – Jetty Piling Underwater Noise Modelling Report (Section 1.2 Noise propagation modelling): We note the use of a logarithmic calculation to predict transmission loss underwater, however point out that a noise spreading term of 10 is used for cylindrical spreading (rather than spherical), and a spreading term of 20 refers to spherical spreading (rather than cylindrical).

NB* This is a minor point and maybe a result of a typological error?

Marine Ornithology

We have no concerns regarding the impact of the project on marine ornithological receptors.

Marine Fish

Given the small abstraction volume of $0.042\text{m}^3\text{s}^{-1}$, use of a 1mm mesh screen on the intake pipes, very limited amount of piling (~10 hours of piling in total over a 60 day period), and closure of the Port Talbot dock gates during piling activities, We agree with the conclusion of the assessment presented in the draft ES and have no concerns about the impact of the project for marine fish.

Protected Species

We have considered the information prepared in support of the above proposed development including:

- Project Dragon. SAF Production Facility Lighting Assessment by Lanza Tech UK Limited dated 11 August 2023;

- Project Dragon, Port Talbot. EIA Scoping Report by Turley dated May 2023;
- Ecological Impact Assessment. Project Dragon, Port Talbot Docks by RPS dated August 2023.

We note that the terrestrial ecology chapter of the ES is not included within this consultation, also the lighting report appears incomplete, with the appendices missing. We advise that these matters are addressed for the formal submission.

Otters

We note that the wider open water dock is likely to be used by otters foraging and moving through the area, but that the surveys of the site did not record any evidence of otter activity or resting places, and the habitats on site of negligible value to the species. We advise that lighting of the site avoids lighting the open water of the dock and that the following good practice measures are included in any CEMP approved for the scheme:

- i. Daytime working hours are adopted for any construction works, to commence no sooner than one hour after sunrise and finish no later than one hour before dusk.
- ii. Construction materials will be stored well away from the watercourse in way that prevents otters gaining access or using them to rest in (Eg. pipe ends will be capped or covered).
- iii. Any trenches that are left open overnight will have planks of wood placed at regular intervals to allow otters a way out.
- iv. All tools, food, litter and construction materials and packaging that may constitute a hazard to otters will be removed daily from the site.
- v. Any areas that may be suitable for use by otters will be checked immediately prior to works commencing by a suitably qualified, experienced and licensed ecologist.

We also note that a draft CEMP has been prepared for the scheme but there is no mention of good practice working measures relating to otters.

We advise that the above matters could be dealt with through the use of appropriately worded conditions attached to any planning consent issued for the scheme requiring:

- a final version of the CEMP to be agreed, and
- the submission of a lighting plan to be agreed (if not already covered by the appendices of the lighting report).

Flood Risk

We have reviewed the FCA prepared by JBA (Rev. E dated August 2023) and would have the following comments to make.

The proposed development is located within Zones B and C2 of the Development Advice Map and partly within Flood Zones 2 and 3 (Rivers and Sea) of the Flood Map for Planning. The FCA does refer to the NRW FRA maps however we would advise that these maps have no official status for planning purposes and they should not be used to inform a FCA.

To assess the flood risk to the site, JBA have utilised a fluvial and tidal flood risk model for Port Talbot. This model has been checked by NRW and is suitable for use to inform the FCA.

It should be noted that a 75 year lifetime of development should be considered for this development, however the model has not been updated for this development and therefore the results are for a 73 year LoD, the FCA does note that there will be an additional increase of 25mm based on the UKCP18 dataset for the missing 2 years but concludes that this is negligible. Based on the predicted tide levels and proposed ground levels for the site, we would agree with this.

The model demonstrates that in the fluvial scenario, the development site is flood free up to and including the 0.1% event. During the existing tidal scenario, the majority of the site will remain flood free during the 0.1%+cc event, however there will be a small amount of water overtopping from the Docks onto the access roads to the north of the site and flowing in a southerly direction before ponding in a low spot in the north of the Production Development Zone. A small part of the internal access road is also shown to flood.

To mitigate against this flood risk in the Production Development Zone, it is proposed that ground levels in this area will be raised to a minimum of 7.5mAOD and as such, the area will be shown to be flood free during the 0.1%+cc event. The small amount of flooding to the access road will remain as there are no changes to the ground levels at this location. Depths of flooding are expected to be around 4mm.

The FCA also confirms that there will be no increase in flood risk to third party land as a result of the proposed development.

Therefore, we would offer no objection to the proposed development, which demonstrates that the main area of development (Production Development Zone) will be flood free during the 0.1% fluvial and 0.1%+cc tidal scenarios and therefore compliant with TAN15, with the exception of a very small area of flooding on an existing access road adjacent to the Dock.

Groundwater and Contaminated Land

We have reviewed the following documents:

- Lanzatech Project Dragon Temporary Construction at Margam Wharf Desk Study Version A dated July 2023
- Lanzatech Project Dragon- Sustainable Aviation Fuel Production Facility (SAF)- Production Development Zone – Desk Study Version F August 2023

We agree with the recommendations, in both desk studies for further work. To that end we note that a further report has been supplied.

- Lanzatech Project Dragon- Sustainable Aviation Fuel Production Facility (SAF)- Production Development Zone Exploratory Ground Investigation Version D Report August 2023

We agree with the statement in section 6.2.7 in that extra sampling is needed to confirm the preliminary assessment and fully determine the potential risk to controlled waters and any potential remedial measures required.

We note that there is not complete coverage of the site for all the suspected contaminants, and further work should include the densities recommended in BS:10175 Investigation of potentially contaminated sites. Code of practice.

If an application was made for full planning permission, we would ask for the following conditions:

Land affected by contamination

Condition: No development shall commence until the following components of a scheme to deal with the risks associated with contamination at the site, has been submitted to and approved in writing by the Local Planning Authority.

1. A preliminary risk assessment which has identified:

- all previous uses **if the above reports are supplied we would agree that this part of the condition has been met**
- potential contaminants associated with those uses **if the above reports are supplied we would agree that this part of the condition has been met**
- a conceptual model of the site indicating sources, pathways and receptors **if the above reports are supplied we would agree that this part of the condition has been met**
- potentially unacceptable risks arising from contamination at the site **if the above reports are supplied we would agree that this part of the condition has been met**

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

The remediation strategy and its relevant components shall be carried out in accordance with the approved details.

Justification: To ensure the risks associated with contamination at the site have been fully considered prior to commencement of development as controlled waters are of high environmental sensitivity; and where necessary remediation measures and long-term monitoring are implemented to prevent unacceptable risks from contamination.

Contamination verification report

Condition: Prior to the operation of the development a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include a long-term monitoring and maintenance plan for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be carried out in accordance with the approved details.

Justification: To ensure the methods identified in the verification plan have been implemented and completed and the risk associated with the contamination at the site has been remediated prior to occupation or operation, to prevent both future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

Long term monitoring plan

Condition: Prior to the operation of the development, a long term monitoring plan for land contamination shall be submitted and approved in writing by the Local Planning Authority.

The long term monitoring plan should include:

- Details of the methods and triggers for action to be undertaken
- Timescales for the long term monitoring and curtailment mechanisms e.g. a scheme of monitoring for 3 years unless the monitoring reports indicate that subsequent monitoring is or is not required
- Timescales for submission of monitoring reports to the LPA e.g. annually
- Details of any necessary contingency and remedial actions and timescales for actions
- Details confirming that the contingency and remedial actions have been carried out

The monitoring plan shall be carried out in accordance with the approved details, within the agreed timescales.

Justification: A land contamination long term monitoring plan should be submitted prior to occupation or operation, to ensure necessary monitoring measures are approved to manage any potential adverse impacts as a result of development on water quality

Unsuspected contamination

Condition: 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 a remediation strategy detailing how this unsuspected contamination shall be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be carried out as approved.

Justification: To ensure the risks associated with previously unsuspected contamination at the site are dealt with through a remediation strategy, to minimise the risk to both future users of the land and neighbouring land, and to ensure that the development can be carried out safely without unacceptable risks.

Piling

Condition: No development shall commence until details of piling or any other foundation designs using penetrative methods sufficient to demonstrate that there is no unacceptable risk to groundwater have been submitted to and approved in writing by the Local Planning Authority. The piling/foundation designs shall be implemented in accordance with the approved details.

Justification: Piling/foundation details should be submitted to ensure there is no unacceptable risk to groundwater during construction and methods/design are agreed prior to the commencement of development or phase of development.

Natural Resources Wales recommends that developers should:

1. Follow the risk management framework provided in [Land contamination risk management \(LCRM\)](#)
2. Refer to '[Land Contamination: a guide for developers](#)' (WLGA, 2017) for the type of information that we require in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health.
3. Refer to our [groundwater protection](#) advice on www.gov.uk

Informative/ advice to LPA

In relation to the proposed development, in so far as it relates to land contamination, Natural Resources Wales only considered issues relating to controlled waters and relevance of regulatory regimes where Natural Resources Wales is the enforcing authority, such as Environmental Permitting Regulations (EPR, 2016).

Air Quality and Noise

We have presented a high-level review of the submission i.e. chapter 12 of the EIA. We have not reviewed or commented on the accuracy of the predicted modelling results or resulting assessment of potential impact.

- The use of BS4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound' (BS4142) is acceptable for assessing impact on residents.
- The use of sound propagation model Predictor (v2023) is acceptable for modelling the noise impact.
- We have not commented on noise and vibration impacts associated with the construction. The Local Authority will consider this.

BS4142 is specifically written to assess the impact of sound on people who might be inside or outside a dwelling or premises used for residential purposes. The UK Environment Agencies' noise guidance entitled - 'Noise and vibration management: environmental permits' also references BS4142 as the main methodology for assessing the impact from an industrial source.

The Large Volume Organic Chemical BRef has been highlighted as the primary BRef and the applicant has also considered the Common Waste Water BRef. These references have been confirmed with our decarbonisation team who are leading on the pre-application process for the environmental permit.

You have used a sensitivity categorisation for receptors including residential as 'medium' and quiet areas (designated under the Noise and Soundscape Action Plan 2018-2023) as 'high'. It is unclear how they have come to this conclusion.

Our guidance suggests that if the initial risk assessment indicates a risk of vibration outside the site boundary, the applicant must submit a vibration impact assessment to us using BS 6472. The applicant has not provided reference to BS 6472 which may be required for the submission of the environmental permit application.

You have not provided any consideration of whether the use of soundscape assessment techniques and interventions could deliver enhanced outcomes.

Your assessment indicates adverse impact is likely at the SSRs 3 and 7, however mitigation is provided in the report with the suggestion that the noise from the ship pumps during unloading will not be in control of the applicant and that an element of ship activity around the port is to be expected. It is unclear to us whether the permitted installation boundary would encapsulate the offloading activities at the jetty and therefore whether the pumps would be considered an activity that would be regulated under the environmental permit.

Noise data has been gathered from project technical team for significant sources and used to populate the model however, it is unclear whether these sources include 1/3rd octave spectra or, like other plant and activities associated with the proposal, the spectra has been taken from the modelling software database (Predictor). Any outside the site boundary, you must submit a vibration impact assessment to us using BS 6472. The applicant has not provided reference to BS 6472 which may be required for the submission of the environmental permit application.

Industry Regulation

The proposed development of a facility for the production of sustainable aviation fuel (SAF) in the form of Alcohol to Jet Synthetic Paraffinic Kerosene (ATJ SPK), and Renewable Diesel (ATJ-RD) at land adjacent to Tata Steel by the applicant LanzaTech will require an Environmental Permitting Regulations (EPR) Installations permit under Part A(1) Section 4.1 (a) (i) of the Regulations (Large Volume Organic Chemical activity). The installation planning application specifies the storage of hazardous substances and ethanol and other substances included in the operator's proposal are named as dangerous substances within the Control of Major Accident Hazards Regulations (COMAH). There is a requirement to notify the Competent Authority if the storage quantities fall within the COMAH threshold (Schedule 1, Part 1 and 2).

The planning application outlines environmental assessments for example noise and air quality, however the process will require an EPR Permit application which will be reviewed in line Best available technology via the permitting determination process which will also consider relevant environmental impacts including potential drainage and discharge impacts.

Hydrology and Water Resources

Abstraction Licence

The ES notes that an Abstraction Licence is likely to be applied for. This should be done in the regular way with the Water Resources Permitting team, with the Hydrology team then acting to provide specific data to inform the decision. Licencing is carried out by our Hydrology and Water Resources team on a case-by-case basis. Regard will be made for the current CAMS licencing policy (Swansea Bay, Neath, Afan and Tawe) in this waterbody:

There is no water available for licensing.

This means that:

- Licences will only be considered for consumptive abstractions at the highest flows. These will be considered due to the economic importance of development in the area.
- Applications for new consumptive abstractions will be considered on a case-by-case basis and would need to be supported by an appropriate business case.
- Licences for non-consumptive abstractions would be considered.
- Any new licences will be issued with appropriate HOF conditions. Groundwater licences would not normally be available unless appropriate constraints are included as part of the conditions.

Other Matters

Please note, if further information is prepared to support an application, it may be necessary for us to change our advice in line with the new information.

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

In addition to planning permission, you are advised to ensure all other permits/consents/licences relevant to the development are secured. Please refer to our [website](#) for further details.

Further advice on the above matters could be provided prior to your planning application being submitted, however there would be a charge for this service. Additional details are available on our [website](#).

Yn gywir / Yours faithfully

Louise Edwards

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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.