Residential development of land at Morfa Permit Application

Contents

Refusal of a Tier 2 bespoke permit application

We have decided to refuse the permit application for residential development of land at Morfa.

The applicant is Eaden Homes Limited. We refer to Eaden Homes Limited as "**the applicant**" in this document.

Eaden Homes Limited's proposed facility is located at Morfa, Trearddur Bay, Anglesey, LL65 2TY. We refer to this as "**the proposed facility**" in this document.

What this document is about

This is a decision document which details the determination of the above permit application.

It explains how we have considered the applicant's application, and why we have refused to grant a permit. It is a record of our decision-making process, to show how we have taken into account all relevant factors in reaching our decision.

This decision document only discusses the reasons for refusal to grant a permit. Where details are not discussed in this document it means that we have considered the application and accepted the details are sufficient and satisfactory.

We consider in reaching that decision, we have taken into account all relevant considerations and legal requirements.

Preliminary information and use of terms

We gave the application the reference number PAN-001409. We refer to the application as "**the application**" in this document in order to be consistent.

The application was considered to be duly made as of 07 April 2017.

Key issues of the decision

1 Our decision

Based on the information currently available to us we are refusing the permit application.

We carefully considered the application and all other relevant information before we reached a decision. Having considered the information submitted with the application and further information submitted during the determination, we are not satisfied that the applicant has demonstrated that the proposed activity is for "recovery" purposes. In addition to this we are not satisfied that the applicant has adequately considered and addressed the risk of flooding to the surrounding area from proposed activity.

Our decision has been influenced by the following principles:

- **In accordance with the relevant guidance – *'How to apply for a waste recovery environmental permit to permanently deposit waste on land'* the submitted waste recovery plan does not demonstrate that the activity is for recovery purposes.**
- **The waste recovery plan fails to demonstrate that there is an obligation to do the work.**
- **Therefore, a landfill permit is required as the proposed activity is for disposal and not recovery.**
- **The risk of flooding to the surrounding area from the proposed activity, given the sensitivity of location and that the proposed site is completely within Flood Zones 3 and 2 and also within Development Advice map zone C2 (as per TAN15: Development and Flood Risk).**
- **This aspect of the waste recovery plan contravenes the guidance *'How to apply for a waste recovery environmental permit to permanently deposit waste on land'* which states that the finished scheme must not result in environmental problems such as flooding. This aspect forms part of the "recovery test".**

  We are therefore unable to grant a permit for this activity, given that the waste recovery plan does not demonstrate an obligation, that the activity is for recovery purposes and the risk of flooding to the surrounding area.

2 How we reached our decision

2.1 Receipt of application

On 22 March 2017 Eaden Homes Limited submitted a Tier 2 bespoke permit application. A Tier 2 bespoke permit is based on a standard rule permit and can be applied for when the proposed facility does not meet the location criteria for a standard rule permit. The application was for a Tier 2 bespoke permit based on standard rules permit 2010 Number 7 – *the use of waste for construction*. The location criteria for this standard rule set includes that the activities must not be carried out within 500 metres of a European Site, Ramsar site or a Site of Special Scientific Interest (SSSI). As the proposed site is within 50m of Beddmanarch-Cymyran (SSSI) it does not meet the location criteria and hence why the applicant submitted a Tier 2 bespoke application. For Tier 2 bespoke applications, as part of the determination of the permit application, the applicant only needs to address the elements of the location criteria of the standard rule permit that it could not meet. For this application this included Beddmanarch-Cymyran (SSSI).

Please note: due to changes in the standard rule permit, the Tier 2 bespoke permit based on standard rules permit 2010 Number 7 – *the use of waste for construction* is no longer available. This application was accepted as it was received prior to the standard rule permit changes.

The application included a waste recovery plan in their application.

The application was accepted as duly made on 07 April 2017. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination. Further information was requested during the determination and this is explained in this document.

The applicant made no claim for commercial confidentiality. We have not received any information in relation to the application that appears to be confidential in relation to any party.

2.2 Consultation on the application

We placed a copy of the application and all other documents relevant to our determination on our electronic Document Management System which acts as our Public Register. Anyone wishing to see these documents could do so on request and arrange for copies to be provided.

2.3 Requests for further information

Background on waste recovery

Waste recovery is when your main aim is replacing a non-waste material you would have used in your operation with a waste material that performs the same function.

Applicants need to demonstrate that they are replacing non-waste materials by submitting a waste recovery plan (WRP) to Natural Resources Wales. The WRP must cover all the points in the guidance on waste recovery plans and permits – *the Environment Agency's 'How to apply for a waste recovery environmental permit to permanently deposit waste on land'.* Although this guidance was produced by the Environment Agency, we have adopted this guidance in Wales.

The WRP guidance clarifies the regulators position on what constitutes recovery operation for these types of activities and to support implementation of the standard rules set that was brought in in 2010 (as a result of waste exemption review). The guidance is designed to be a standardised way of applying the test for recovery versus disposal activities and to create a level playing field for customers.

WRPs are assessed by us using the above guidance, to decide if a customer's activity is for the recovery or disposal of waste. The waste recovery plan is a way of demonstrating that the proposed activity meets the definition of recovery in Article 3 (15) of the Waste Framework Directive. If the activity is assessed as disposal, customers cannot apply for a waste recovery permit. The appropriate permit type that should be applied for is a landfill permit. If the activity is assessed as recovery, the customer can apply for either a standard rule permit or a full Tier 3 bespoke permit for the recovery of waste.

The permit application process is broken down into three distinct stages; pre-application, duly making and determination. NRW offer to assess WRPs in advance of an application being made (the pre-application stage), or, as part of a permit application (the determination stage). Most customers choose to have their WRP assessed at the pre-application stage.

If a waste recovery plan is submitted as part of an application, as the Regulator we need to assess whether the waste recovery plan meets the legal test and demonstrates the work proposed is for recovery purposes. Following an assessment, if we deem that the waste recovery plan does not demonstrate recovery we must refuse the permit.

If we deem that the work proposed is for recovery purposes, we will then continue to assess the rest of the application. This includes assessing the risks from carrying out the activity and depositing the waste, as this could generate emissions including dust and noise.

The WRP is a way of demonstrating that the operator meets the definition of recovery in Article 3 (15) of the Waste Framework Directive. The WRP is a legal test

so that it is clear what level of environmental protection needs to be in place i.e. measures to protect the environment will be different for a disposal activity than for a recovery activity.

For this application, we do not consider that the WRP demonstrates recovery. Therefore, we have not assessed the rest of the application. There are designated sites that are within close proximity of the proposed site that have not been addressed or considered in the WRP or in the application. As we do not consider this to be a recovery activity, but a disposal activity, we did not request further information from the applicant in relation to these. Requesting further information on how the risks to these designated sites would be mitigated would not have changed our decision. Under DEFRA core guidance we should only ask for information in order to help us make a decision.

DEFRA core guidance states:
6.18 The regulator should only require further information where that information is essential to allow the application to be determined.

Although we did not fully assess other elements of the application, we have included information in this document to ensure that the applicant is made aware of other issues that need to be considered, should they wish to submit an application to us in the future. Based on the information provided and on our assessment that the activity is disposal, a landfill permit application would be appropriate. Further information is detailed in Section 6 of this document.

Request for Information at Duly Making Assessment Stage
In order for us to be able to consider the application duly made, we needed more information. On 03 April 2017, we emailed the applicant and advised them that we had not assessed a WRP for the proposal or confirmed the activity as waste recovery.

We advised the applicant that in accordance with the application form guidance (Part B4), that they should confirm the activity is recovery with us before they apply for a permit. This is because if we have not assessed a WRP for the proposal prior to an application being made, we must assess it as part of the determination of the application. If we do this and assess the activity as disposal, we must refuse the application and keep the application fee.

We advised the applicant that alternatively they could withdraw the application and we could assess their WRP as part of our pre-application advice and guidance service. We would then confirm if the activity is recovery or disposal. We advised that: If we considered that the activity was recovery, the applicant could resubmit an application for a permit for the permanent deposit of waste for recovery. If we

considered that the activity was disposal the applicant could submit further information to us to demonstrate that the activity was for recovery purposes.

Based on the information above, we asked the applicant to confirm how they wanted to proceed – by either withdrawing the application and fee and having the WRP assessed as part of pre-application, OR, continue with the application as submitted.

We advised the applicant that if they wanted to continue with the application as submitted, that the following information needed to be submitted:

- A revised site specific risk assessment which acknowledges sensitive receptors and the measures that will put in place to protect them.
- Confirmation if the relevant, formal qualifications to manage the activity are already held.

Further to our email to the applicant sent 03 April, the applicant responded on 07 April 2017 and confirmed that they wished to proceed with the determination of the application as submitted and confirmed that they did not wish to withdraw the application. The applicant provided a revised site-specific risk assessment and evidence of formal qualification. Upon receipt of this information we were able to consider the application duly made as of 07 April 2017.

Request for Information at Determination Stage
During the application determination process, in accordance with the Environmental Permitting Regulations and DEFRA Core guidance, we are able to request further information that we require in order to complete our determination. We can do this formally or informally.

When we request information formally we do this by serving a 'Schedule 5 Notice' to the applicant. A Schedule 5 Notice is a legal notice that clearly specifies what information we require to determine the application, why we need that information and by when the applicant must submit the information. The applicant must provide all of the information specified in the notice.

Informal Request for Information (dated 07 June 2017)
We assessed the applicant's WRP in accordance with "Guidance – Waste recovery plans and permits". The information provided within the WRP did not justify that the activity is a recovery operation. Primarily, the WRP stated that the benefit of the proposed works is to raise the land as required in order to fulfil the requirements of the extant planning consent (as detailed in Section 3.1.1 of the WRP). Further information on this is detailed in Section 5 – Key issues.

Secondly, the site is completely within flood zones 3 and 2 and also within Development Advice map zone C2 (as per Technical Advice Note 15: Development

and Flood Risk). TAN15 is a document that supports Planning Policy Wales, and is the guidance document which we use in assessing Flood Risk Management in development proposals and consultations such as this Waste permitting application. In accordance with the guidance *'How to apply for a waste recovery environmental permit to permanently deposit waste on land'*, waste recovery plans must include how the work carried out will meet quality standards. This includes demonstrating that the finished scheme does not result in any environmental problems including such as the increased risk of flooding in the surrounding area. This was not considered or addressed in the WRP.

In accordance with the guidance, the plan lacked information and evidence in other areas and these are detailed below in Section 5 – Key issues.

We sent our assessment of the WRP to the applicant on 07 June 2017. We advised the applicant that as the WRP was submitted with the application, the following choices were available to them:

1. *We issue a formal request for information (Schedule 5 Notice) for suitable evidence to demonstrate that this is a recovery operation. Please note that this will include, but not be limited to: suitable planning permission and the requirement for you to direct us to the relevant conditions within your planning permission; provide confirmation from the local planning authority that they will enforce against the requirement should it not be completed, and, whether the local planning authority would be likely to agree anything significantly different to the requirements of the permission. If you provide this information will refer your WRP to our internal panel for a final decision.*

   If we determine that the evidence does not demonstrate that this is a recovery activity, we will refuse your application and you will lose your fee.

   Or;

2. *You withdraw your application and re-apply when you have a waste recovery plan that demonstrates the activity is for recovery purposes. Please note that if you choose to do this you will lose your fee, however you could then obtain pre-application advice to help you with your waste recovery plan before you submit it. Please note: If you choose to do this we would suggest that you do this sooner rather than later in case any changes are made to our process for assessing waste recovery plans.*

On 12 June 2017, the applicant confirmed that they wished to proceed with the application and requested to be served with a formal notice for further information and requested details of the relevant officer in our Flood Risk team.

Schedule 5 Notice 1 (dated 27 June 2017)
Further to the applicant's request, on 27 June 2017 a Schedule 5 Notice was issued, with a deadline of 26 July 2017. The Schedule 5 Notice requested the following information:

1. Function of the work
Section 3.1.1 of the waste recovery plan (WRP) states that "the importation of suitable materials to raise the development platform to a formation level of 3.4mAOD is required in order to fulfil the requirements of the extant planning consent for the site in preparation for the construction of the dwellings". We have reviewed the planning permission submitted as part of the WRP. The planning permission is for "the layout and detailed plans for the erection of 45 dwellings and layout for a further 38 plots on the land".
The planning permission (dated 1983) does not include any conditions requiring the applicant to raise the land in order to carry out the work. Furthermore, it does not mention the risk of flooding or include any conditions relating to mitigating this risk. Therefore, you have not provided evidence of why the work is needed and how the work will meet that need.
The planning permission includes (Drawing Ref: 801G/13) which shows the proposed contours that the land will be raised to. However, the WRP does not include evidence of why these contours have been used and how raising the land to this level will prevent flooding.

ACTION: Please provide written evidence from Anglesey Council Development Control which confirms that the proposed contours in Drawing Ref: 801G/13 have been specifically designed to raise the land out of flooding levels. We require this information to support the proposed function/need for your work: 'as part of the consented residential development it will be necessary to raise the land levels above 3.4AOD in order to mitigate the risk posed by flooding to the consented development'.

If you cannot provide this confirmation, we cannot accept the function/benefit section of your waste recovery plan as recovery.

2. Appropriate standards
Our guidance includes a section on meeting quality standards that you must include in your WRP. These standards include providing evidence to show how the work will be designed and constructed and fit for purpose. The finished scheme must not result in any environmental problems such as the increased risk of flooding in the surrounding area.
Section 4.1.4 states that "Suitable materials, placement and compaction suitable materials, should meet the requirements of the following fill materials classified in the Specification for Highway Works (2005)". However, you have not detailed the specific standards that the work will be carried out to.

ACTION: Please provide the specific standards that the work will be carried out to. Please confirm the following:
- what measures will be used to prevent sediment run off
- what waste types will be used for what purpose.
- The WRP includes the layers of the land but the plan does not specify which waste will be used for which each layer. Please confirm this.

Section 1.2.2 states that “As part of the consented residential development it will be necessary to raise the land levels to above 3.4m AOD in order to mitigate the risk posed by flooding to the consented development”. The site is completely within flood zones 3 and 2 and also within Development Advice map zone C2 (as per TAN15: Development and Flood Risk). This is related to tidal flood risk. **The risk of flooding to the surrounding areas from carrying out the work has not been considered or addressed in the WRP.**

ACTION: Please provide an assessment which investigates the impact of the works on flood and drainage risks to the site and possible impacts on third party interests.

This should include:
- All sources of flooding should be investigated and addressed including tidal and pluvial risks for a range of events.
- Extreme sea levels with appropriate climate change allowances (suggest CL-03-16) should be considered along with wave overtopping volumes. The open channel through the site conveys flood waters from overtopping/tidal events along Lon Isallt during current day events as will for future events.
- Due consideration should also be given to tidal flood risk from the east/Inland Sea should a failure/breach of the B545 Four Mile Bridge structure (assuming a breach of 20m) occur.
- Agreement should be sought from our Flood Risk and Development team on overtopping rates/volumes to be used in any linked 1D-2D hydraulic modelling for the site/area prior to constructing the model. The base model should use ground levels prior to any infilling occurring and the suitability and dates of any LiDAR (Light Detection and Ranging) flows should be justified in any assessment.

We would expect that the results of the hydraulic modelling work/flood assessment to show no detriment elsewhere due to the land raising.

3. Physical characteristics of waste
The WRP does not include confirmation or evidence from an appropriately qualified person that the waste materials being used are suitable for their intended use and are comparable to the non-waste material they are replacing i.e. confirmation of what non-waste materials would be used and whether the proposed wastes are physically comparable to those non-wastes. We expect this confirmation to be provided by a qualified civil engineer.

ACTION: Please provide evidence of this.

4. Chemical characteristics of waste

Section 4.2.4 includes details that waste analyses (if available) including leachability tests will be provided, however the WRP should include more information on what testing will be carried out to ensure that only chemically comparable waste is accepted.

ACTION: Please provide detailed information of the testing that will be carried out (including but should not be limited to the following):

- off-site testing to categorise the waste
- what the waste will be tested for i.e. determinants
- what levels of those determinants will be deemed suitable
- how frequently testing will be carried out

5. Substitution test

Your WRP must show that if you couldn't use a waste material you would do work to get the same outcome using non-waste materials. You must include evidence of this in your plan, on the assumption that you feel there is a planning permission requirement for you to complete the work: No evidence has been submitted which demonstrates this.

ACTION: Please provide this information and direct us to the relevant conditions within your planning permission; provide confirmation from the local planning authority that they will enforce against the requirement should it not be completed, and, whether the local planning authority would be likely to agree anything significantly different to the requirements of the permission.

6. Financial gain by using non-waste materials

Your WRP includes some information on the revenue from completion of the works as evidence that the proposal would go ahead using non-waste.

ACTION: In order to demonstrate this fully, please provide the following information:

- Confirmation if the groundworks are being carried out by Eaden Homes Ltd, or if a subcontractor will be employed to do this.
- If a subcontractor will carry out this work, you must provide the value of land after the groundworks have been completed, non-waste costs and the cost of carrying out this work. The resulting value will show if a profit will be made from the activity and would demonstrate that the proposal would go ahead using non-waste.

Please note that we are asking for clarification on whether the subcontractor is undertaking the ground works (i.e. the deposit of waste) as the subcontractor cannot include the revenue generated from the sale of the homes to show a net financial gain. The ground works subcontractor can only include the value of the land after ground works have been completed.

ACTION: Please provide a revised WRP that includes all the information as detailed above.

PLEASE NOTE:
In accordance with the guidance, there are 3 main ways you can show evidence that you're using waste in place of non-waste. These are:
- Financial gain by using non-waste materials,
- Funding to use non-waste and;
- Obligations to do the work

To demonstrate that the activity is recovery, you only need to pursue one line of evidence:
1. obligations to do the work

Or;
2. Financial gain by using non-waste materials

Please note that if you decide pursue the line of financial gain by using non-waste materials, you will still need to provide planning permission to demonstrate the function of the work and why the work needs to be done.

The applicant responded to the Schedule 5 Notice on 26 July 2017 and provided a revised version of the waste recovery plan. Although some of the additional information supplied by the applicant satisfied the requirements of the Schedule 5 Notice, we assessed the revised version of the waste recovery plan and did not consider that the evidence provided demonstrated that the activity was for recovery purposes. We will explain further in section 5 – Key issues.

Copies of the information notices and e-mails requesting further information have been placed on our public register.

3 The legal framework

The application is subject to the Environmental Permitting Regulations (England and Wales) 2016. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope.

In particular, the proposed facility is:

- A regulated facility as defined in regulation 7 of the Environmental Permitting Regulations.
- A waste operation covered by the Waste Framework Directive, because it accepts waste.
- Subject to Article 3 (15) of the Waste Framework Directive.
- Subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which have also been considered.

4 The proposed site

4.1 The proposed site location

The proposed site is located in Morfa, off the coast of Treddrur Bay, Anglesey. The site is completely within flood zones 3 and 2 and also within Development Advice map zone C2 (as per Technical Advice Note 15: Development and Flood Risk). This is related to tidal flood risk. The site is within 1km of the Special Area of Conservation – North Anglesey Marine/ Gogledd Mon Forol which lies to the west of the site, Special Protection Areas Anglesey Terns / Morwenoliaid Ynys Môn which lies to the East and the West of the site, part of the site is within an Area of outstanding natural beauty – Ynys Mon/ Anglesey and Site of Special Scientific Interest Beddmanarch-Cymyran lies within 50m to the east of the site.

There is an un-named watercourse flowing through the site in a north to south direction.

Further information on the risks to these designated sites from the proposed activity is included in *Section 6 – Other relevant issues and Section 7 – Environmental issues: likelihood of pollution*.

4.2 The proposed activities

As detailed in section 2 above, the application submitted was for a Tier 2 bespoke permit based on standard rules permit 2010 number 7 – *the use of waste in construction*. The proposed activity is for the use of 20,000m^3 of waste material.

The proposed activity is to enable a housing development to be built on the proposed site. The waste recovery plan states that the proposed activity is required to *"raise the land levels to above 3.4m above ordnance datum (AOD) in order to mitigate the risk posed by flooding to the consented development. To facilitate the raising of land levels at the site it is necessary to import approximately 20,000m^3 of material."*

5 Key issues in the determination

The key issues arising in this determination were:

The submitted waste recovery plan does not demonstrate that the activity is for recovery purposes, in accordance with the relevant guidance – *'How to apply for a waste recovery environmental permit to permanently deposit waste on land'.*

The proposed site is completely within flood zones 3 and 2, and also within Development Advice Map zone C2 (*as per Technical Advice Note (TAN) 15: Development and Flood Risk*). Taking this into consideration there is a potential risk of flooding to surrounding areas.

We will describe these issues in more detail in this document.

5.1 Demonstrating waste recovery

In accordance with the guidance '*How to apply for a waste recovery environmental permit to permanently deposit waste on land'* guidance, there are 3 main ways that an applicant can provide evidence to demonstrate that they are using waste in place of non-waste. These are:

1. Financial gain by using non-waste materials,
2. Funding to use non-waste, or;
3. Obligations to do work

In addition to this and in accordance with the guidance '*How to apply for a waste recovery environmental permit to permanently deposit waste on land'*, the waste recovery plan must also demonstrate the following:

- **Specific obligations** – including evidence of the obligation to do the work proposed.
- **General obligation** – waste recovery plan must demonstrate why you would meet that obligation by carrying out the work proposed. It must also show how your proposed work meets your obligation.
- **Other evidence the waste is suitable** – including information about the chemical and physical properties of the waste.
- **Purpose of the work** – this needs to clearly describe the function of the proposed work and show that the work is to be carried out to meet a genuine need. The evidence should set out:
    - how the work will be carried out and completed
    - why the work is needed and how the work will meet that need

- **Quantity of waste used** – evidence must be provided to show that:
    - the waste material used will directly replace non-waste material
    - applicants will only use the amount of waste needed to carry out the function that would otherwise be provided by non-waste
    - applicants have considered alternative proposals that could use a smaller amount of waste to achieve the same function
- **Meeting quality standards** - must provide evidence to show how the work will be:
    - designed and constructed
    - fit for purpose
- **The finished scheme must not result in any environmental problems such as:**
    - soil erosion
    - pollution
    - increased risk of flooding in the surrounding area

5.2 Waste Recovery Plan (dated 20 March 2017 - submitted with application)

We assessed the WRP submitted with the application, in accordance with the relevant guidance – "*How to apply for a waste recovery environmental permit to permanently deposit waste on land'.* The waste recovery plan included details on the function of the work and the revenue from completion of the works as evidence that the proposal would go ahead using non-waste. This information is in relation to points 1 and 3 in section 5.1 above.

However, the submitted WRP did not provide sufficient evidence to demonstrate that the there was a) an obligation to do the work, or b) that there was financial gain by using non-waste materials. If a WRP does not include evidence to demonstrate that there is an obligation to do the work, the activity cannot be considered as recovery.

As stated in *'How to apply for a waste recovery environmental permit to permanently deposit waste on land'*:

Purpose of the work

You need to clearly describe the function of your proposed work and show that you're carrying out the work to meet a genuine need.

Your evidence should set out:

- *how the work will be carried out and completed*
- *why the work is needed and how the work will meet that need*

In addition to this fundamental point of demonstrating recovery, the plan submitted lacked sufficient information in other areas. A formal request for further information via a Schedule 5 Notice was issued to the applicant on 27 June 2017, with a deadline of 26 July 2017. The Schedule 5 Notice includes requests for the following information (see Section *2.3 Requests for further information* above for the full Schedule 5 Notice):

1. **Function of the work**

Section 3.1.1 of the waste recovery plan (WRP) states that *"the importation of suitable materials to raise the development platform to a formation level of 3.4mAOD is required in order to fulfil the requirements of the extant planning consent for the site in preparation for the construction of the dwellings".* We have reviewed the planning permission submitted as part of the WRP. The planning permission is for *"the layout and detailed plans for the erection of 45 dwellings and layout for a further 38 plots on the land"*. The planning permission (dated 1983) does not include any conditions requiring the applicant to raise the land in order to carry out the work. Furthermore, it does not mention the risk of flooding or include any conditions relating to mitigating this risk. Therefore, you have not provided evidence of why the work is needed and how the work will meet that need.

ACTION: Please provide evidence of planning permission that requires the work to be done. Please direct us to the relevant condition.

5. **Substitution test**

Your WRP must show that if you couldn't use a waste material you would do work to get the same outcome using non-waste materials. You must include evidence of this in your plan, on the assumption that you feel there is a planning permission requirement for you to complete the work: No evidence has been submitted which demonstrates this.

ACTION: Please provide this information and direct us to the relevant conditions within your planning permission; provide confirmation from the local planning authority that they will enforce against the requirement should it not be completed, and, whether the local planning authority would be likely to agree anything significantly different to the requirements of the permission.

PLEASE NOTE:

In accordance with the guidance, there are 3 main ways you can show evidence that you're using waste in place of non-waste. These are:

- *Financial gain by using non-waste materials,*
- *Funding to use non-waste and;*
- *Obligations to do the work*

To demonstrate that the activity is recovery, you only need to pursue one line of evidence:

1. *Obligations to do the work*
   Or;
2. *Financial gain by using non-waste materials*

Please note that if you decide pursue the line of financial gain by using non-waste materials, you will still need to provide planning permission to demonstrate the function of the work and why the work needs to be done.

5.3 Schedule 5 Notice response - Waste Recovery Plan (dated 26 July 2017)

In response to the Schedule 5 Notice a revised waste recovery plan was submitted by the applicant on 26 July 2017. We assessed the revised waste recovery plan in accordance with the guidance and do not consider suitable evidence has been included to justify that there is an obligation for the work to be completed. Further detail is included in the following sections.

5.3.1 Obligations to do work

The guidance states:

"You could provide evidence that you're obliged to carry out the work. This could be because a regulator has imposed a requirement on you. For example, you operate a quarry and are required by planning conditions to restore it according to an approved plan. This isn't the same as planning permission, which allows you to do certain work without setting obligations. If there's an existing planning condition or obligation the Environment Agency will look at all the available information. This may include:

- *the extent to which the local planning authority was directly involved in the design of the scheme when planning was granted and the condition imposed*
- *whether the local planning authority would be likely to agree anything significantly different".*

In the first waste recovery plan the applicant submitted planning permission as evidence to demonstrate their obligation to carry out the work. No evidence to demonstrate an obligation to do the work was submitted in the response to the Schedule 5 Notice or in the revised waste recovery plan. The applicant submitted the following information in relation to this point, in their response to the Schedule 5 Notice. We assessed this information and have provided comments where necessary (in bold text):

1.1 *The planning permission is for development as quoted in the Schedule 5 Notice. It also correctly states that there is no condition requiring the applicant to raise land*

levels in order to carry out the work. However, it fails to refer to the appeal decision issued in 1988 when an appeal was upheld against the service of an enforcement notice for alleged unauthorised tipping of material to raise land levels on part of the site. The appeal succeeded on Ground A, that is, that planning permission should be granted for the development against which the enforcement action was initiated.

***1.2** In terms of the extent of the enforcement notice, the plan covers the whole of the site and reflects the area which was the subject of the 1983 planning permission. There is no specific area outlined within the red line plan in the enforcement notice which indicates the part of the site where tipping was alleged to have taken place. Given this, it would appear that the notice was effective in respect of the whole site and, as such, the appeal decision, which granted permission for the tipping, should also cover the whole of the site.*

***1.3** In allowing the appeal, the Inspector commented that:*
"Bearing in mind the nature of the ground, I see no reason to question that the land on which the materials are placed must be raised in order to make it suitable for building on. Notwithstanding the lack of any detailed approval, it still enjoys the benefit of planning permission for residential development. In these circumstances there is, to my mind, no justification in requiring the removal of the deposited materials if they can be levelled and drained satisfactorily, thus overcoming what I see as the basic planning objections to the works undertaken. This course is not beyond the bounds of practical possibility, and indeed technical agreement seems well under way."

***1.4** With regard to the action required by the Schedule 5 Notice, that is, to provide written evidence from the LPA that the proposed contours in Drawing Ref: 801G/13 have been specifically designed to raise the land out of flooding levels, it is not as simple as that. In order to establish what is allowed to be undertaken on the land in terms of development, it is also necessary to consider other decisions relating to development. As such, the appeal decision is critical to the development permitted to be undertaken on the land.*

***1.5** Having established that there is consent for the raising of land levels, it is then necessary to establish the reasoning for increasing land levels to the 3.4m AOD in order to mitigate flood risk. The quality of the drawings and application information available on the LPA's files is sub-standard and it is difficult to make out the detail contained in the drawings, this includes the land level details provided. As such, the landowner commissioned an appropriately qualified surveyor/engineer to interpret level data contained in the drawings with a view to establishing these in relation to Ordnance Datum as opposed to a local datum that the engineer surmised had been used when drafting the original plans.*

1.6 *In an email dated 26 August 2016, the engineer in question (Adam Caldwell of the Datrys consultancy) stated as follows:*
We are working our way through numerous flood modelling criteria and we wish to model the flood impact on the development that received planning permission in 1983. In order to do so we wish to agree the Finished Floor level of the dwellings associated with that application. Having looked through all the records in the office a few months back when we met, I concluded that the planning permission was granted on the basis that the drawings showed a level relative to a local datum rather than ordnance datum.
I have since been converting the local datum back to ordnance datum using levels that would be deemed to have remained unchanged since the 1980's. Effectively the invert of the ditch on the site is my comparison value and it cannot have been raised otherwise would not function. The 750mm culvert in the planning application of 1983 was proposed to be laid at 1 in 600 and its invert would align with the ditch invert at the time. SW6 on the planning drawings appears to be at the boundary and states a value of 28.430. A comparison of position of this level in the ditch at this boundary indicates that the level to ordnance datum is approx 1.78m A.O.D. If 1.78 = 28.430 then the FFL of 30.050 equates to 3.4m A.O.D. As of last year following the topographic survey being undertaken, the levels of the site east of the ditch lie at approximately 2.8 – 3.2mA.O.D whilst the levels of the site west of the ditch lie at approximately 2.0 – 3.0mA.O.D. Can we please come to an agreement of this level of 3.4mA.O.D so we can undertake our flood modelling as required by Natural Resources Wales.

1.7 *On 8 September 2016, the Council's planning enforcement officer, Iwan Jones, forwarded the email to Kevin Dogan, a senior assistant engineer within the Council's Highways' Department, with a view to obtaining Mr. Dogan's "professional thought" with regard to Mr. Caldwell's findings. Mr. Jones' email read as follows:*
I refer to the above site and email below sent by the agent acting on behalf of the developer. A planning application was approved at the site for residential development in 1983. Over a period of time inert material has been deposited on the land. The developer are (sic) of the opinion that the work are (sic) done in accordance with the approved level of land, under the original planning consent. The plans approved under the original planning permission is relatively old an unclear. Nevertheless, the engineer acting on behalf of the developer has provided his findings below. I propose to respond to him by stating something similar as 'Based on your methodology the Local Planning Authority has no reason to contradict your findings'. However, prior formally responding I would be grateful for your professional thought regarding his findings. Do they seem logical to you?

1.8 *Mr Dogan responded on 6 October as follows:*
Further to your e-mail correspondence relating to the above matter, I have now had the opportunity to clarify some of the details with the consulting engineers. As a consequence, I can confirm that the methodology employed to convert the

site/finished floor levels, as shown on the original approved drawings, so that they are now relative to ordnance datum, appears to be reasonable. I trust these observations are of assistance and apologise for the delay in responding.

***1.9** Given the absence of clear plans/drawings on the planning application file to indicate the land levels to be worked towards, the above correspondence summarises the LPA's position on the matter, that is, that land levels should be at 3.4m AOD in order to mitigate risks from flooding.*

The plan suggests culverting the watercourse with a 750mm diameter culvert. The IoACC (as the Lead Local Flood Authority) would be the consenting body for such culverting on an ordinary watercourse. It is understood that they have adopted a no culverting policy (apart from access purposes) and may not consent such culverting works under the Land Drainage Act 1991.

***1.10** In terms of the validity of the planning permission, it should be noted that a claim against Dwr Cymru by the landowner was dealt with by the Lands Tribunal in May 2012. Whilst considering the claim, the compensating authority (Dwr Cymru) conceded one of the preliminary issues under consideration as part of the claims process, this being whether planning permission 1/20/V/131N was in force at the date when the pipelaying works were carried out on the subject land by Dwr Cymru. If the permission was in force in 2004, it was as a result of its implementation within the relevant timescales laid out in the 1983 permission. This being the case, it follows that the permission has been secured in perpetuity.*

***1.11** Discussions with the LPA and the outcome of legal proceedings have proven that:*
• the planning permission relative to the site has been implemented and therefore safeguarded in perpetuity, but there are no specific planning conditions that dictate the height that the land should be raised to;
• the principle of tipping to raise land levels has been established by virtue of the appeal decision in relation to the enforcement appeal lodged by an earlier site owner. The enforcement notice related to the whole of the application site, therefore, unless the area of tipping was precisely indicated within the red line boundary of the enforcement notice plan, it is presumed that the permission granted under the Ground A appeal applies to the whole of the land captured by the red line;
• all conditions requiring discharge appear to have been discharged therefore allowing work to continue without the consents being invalidated and this is confirmed in correspondence from the LPA, not least the one dated 31 March 2011 which confirms that the planning permission granted in 1983 is safeguarded; and
• Given the lack of authoritative data on the LPA's file with regard to land levels, an appropriately qualified professional has established the relevant ordnance datum as opposed to the local datum used in drafting the approved plans. These calculations conclude that finished floor levels should achieve a level of 3.4m AOD and

consultation with the LPA have resulted in an agreed position with regard to the methodology used by the engineer to establish level values relative to AOD as opposed to a local datum.

***1.12** Taking all the above into consideration, planning permission exists for the residential development of the land and the permission has been safeguarded in perpetuity. This has been recognised by several agencies and been subject to legal scrutiny in proceedings relating to the land in question. The site's preparation, in anticipation of the proposed development, includes raising land levels to an appropriate height. The use of construction and demolition waste to do this benefits from the decision of the Welsh Office Planning Inspector on 22 August 1988 which grants planning permission for the tipping of material on the land subject to the appeal which is that of the Morfa site in its totality. The LPA has agreed that the methodology applied by the engineer relating levels to Ordnance Datum values are reasonable and therefore acceptable. The approach in question calculates expected finished floor levels to be at 3.4m AOD.*

We reviewed this information and concluded the following:

It has been put forward that there is an obligation to do work because there is planning permission in place. Planning permission is not however a legal obligation to do work in and of itself. Planning permission is applied for and granted in respect of a certain activity such as housing development. However there is no legal obligation once the planning permission is in place to start the activity it permits. Even if the planning permission contained a specific condition within it such as to raise the land, there would still not be legal obligation to start the works. In looking at the legal obligation to do work consideration is also given as to whether the Local Planning Authority would enforce the obligation. The Planning Authority in this case seem unsure as to whether there is planning permission in existence. The planning permission was granted in 1983 and the Local Authority have taken no enforcement action to date.

Therefore whether the planning permission has been preserved in perpetuity or not, in and of itself the planning permission does not provide a legal obligation to do the work.

The applicant's response fails to demonstrate that there is an obligation to do the work.

On 17 October 2017, we informally advised the applicant that we were intending to refuse the permit application as the waste recovery plan does not meet the definition of recovery based on;

- no evidence to demonstrate that there is an obligation to do the work and;
- consideration of flood risk to the surrounding areas.

Following this, we agreed the applicant's request to extend the determination deadline, in order for them to revisit their answers to the Schedule 5 Notice for further information. This was in relation to our concerns to flood risk from the activity. See sections 5.3.4 *Increased risk of flooding in the surrounding area* and *5.3.5 Consideration of the increased risk of flooding in the surrounding area* for further details.

At this time we also advised the applicant our request was for evidence that they are obliged to carry out the work. We also advised the applicant that this isn't the same as planning permission, which allows you to do certain work i.e. build houses, without necessarily setting any obligations. We advised that the waste recovery plan should have set out exactly how they would meet the planning obligations imposed, and why waste recovery is the most appropriate solution for meeting the obligation. On 28 November 2017, we advised the applicant that before they continue with any further assessment (*in relation to flood risk*) that we were still of the opinion that evidence for a legal obligation to raise the land had not been provided and as such activity does not meet the definition of recovery. We reminded the applicant that planning permission per se is not a legal obligation to do the work.

To conclude, the information submitted by the applicant fails to demonstrate that there is an obligation to do the work.

5.3.2 Financial gain by using non-waste materials

The waste recovery plan submitted with the application included information on the revenue from completion of the works as evidence that the proposal would go ahead using non-waste. However, this information did not demonstrate this fully and further information was requested in the Schedule 5 Notice sent 27 June 2018. Whilst we requested further information to demonstrate financial gain by using non-waste materials, we advised the applicant that if they pursued the line of financial gain by using non-waste materials, that they must also provide planning permission to demonstrate the function of the work and why the work needs to be done.

Demonstrating financial gain by using non-waste materials is one of the three main ways to demonstrate that waste is being used in place of non-waste. However, waste recovery plans must also demonstrate that there is a specific obligation to do the work proposed and why you would meet that obligation by carrying out the work proposed. It must also show how your proposed work meets your obligation.

5.3.3 Environmental impact from permanent deposit of waste

The use of waste in construction can present different types of risk to the environment, these include soil erosion, pollution and the increased risk of flooding in the surrounding area. In accordance with the guidance, waste recovery plans must consider and address the environmental risks from the permanent deposit of waste. **This aspect forms part of the "recovery test". In accordance with the guidance *'How to apply for a waste recovery environmental permit to permanently deposit waste on land'* the finished scheme must not result in environmental problems such as flooding.**

5.3.4 Increased risk of flooding in the surrounding area

The proposed site is completely within flood zones 3 and 2 and also within Development Advice map zone C2 (as per Technical Advice Note 15: Development and Flood Risk). TAN15 is a document that supports Planning Policy Wales and is the guidance document which we use in assessing Flood Risk Management in development proposals and consultations such as this waste permit application. Therefore, for this proposal the principal risk that gives rise to concern is the increased risk of flooding in the surrounding area.

The definitions for the flood zones are:

Flood Zone 3:

- the extent of a flood from rivers with a 1% (1 in 100) chance or greater of happening in any given year
- the extent of a flood from the sea with a 0.5% (1 in 200) chance or greater of happening in any given year

Flood Zone 2:

- the extent of a flood from rivers or from the sea with up to a 0.1% (1 in 1000) chance of happening in any given year
- contains areas recorded to have flooded in the past

Flood Zone 2 is important from a planning context as it forms the basis of Zone C in the Welsh Government Development Advice Map (DAM).
TAN 15 provides guidance which supplements the policy set out in Planning Policy Wales in relation to development and flooding. It provides advice on matters including the use of development advice maps to determine flood risk issues, how to assess the flooding consequences of proposed development and action that can be taken through development plans and development control (management) procedures to mitigate flood risk when planning for new developments. The Development Advice Map (DAM) which supplements TAN 15 is published by Natural Resources Wales. It should be noted that both the Flood Zone maps and the DAM's do not consider the impact of climate change on sea level raises/increases in fluvial flows.

The development advice maps are based on the best available information considered sufficient to determine when flood risk issues need to be taken into account in planning future developments. Three development advice zones are described on the maps, to which are attributed different planning actions.

5.3.5 Consideration of the increased risk of flooding in the surrounding area

"How to apply for a waste recovery environmental permit to permanently deposit waste on land" guidance states:

Meeting quality standards
You must provide evidence to show how the work will be:

- *designed and constructed*
- *fit for purpose*

The finished scheme must not result in any environmental problems such as:

- *soil erosion*
- *pollution*
- *increased risk of flooding in the surrounding area*

As included in Section 5.2 above, the waste recovery plan submitted with the application (dated 20 March 2017) did not consider or address the risk of flooding to the surrounding areas from carrying out the work. The only reference to the risk of flooding in the plan was:

"1.2.2 The site currently comprises open land. As part of the consented residential development it will be necessary to raise the land levels to above 3.4mAOD in order to mitigate the risk posed by flooding to the consented development. To facilitate the raising of land levels at the site it is necessary to import approximately 20,000m^3".

In the Schedule 5 Notice issued to the applicant on 27 June 2017 we requested the following information:

ACTION: Please provide an assessment which investigates the impact of the works on flood and drainage risks to the site and possible impacts on third party interests. This should include:
- All sources of flooding should be investigated and addressed including tidal and pluvial risks for a range of events.
- Extreme sea levels with appropriate climate change allowances (suggest CL-03-16) should be considered along with wave overtopping volumes. The open channel through the site conveys flood waters from overtopping/tidal events along Lon Isallt during current day events as will for future events.

- Due consideration should also be given to tidal flood risk from the east/Inland Sea should a failure/breach of the B545 Four Mile Bridge structure (assuming a breach of 20m) occur.
- Agreement should be sought from our Flood Risk and Development team on overtopping rates/volumes to be used in any linked 1D-2D hydraulic modelling for the site/area prior to constructing the model. The base model should use ground levels prior to any infilling occurring and the suitability and dates of any LiDAR (Light Detection and Ranging) flows should be justified in any assessment.

We would expect that the results of the hydraulic modelling work/flood assessment to show no detriment elsewhere due to the land raising.

In relation to flood risk, the applicant's response to the Schedule 5 Notice did did not include a hydraulic modelling work/flood assessment. Instead the applicant included the following information. This information was provided 26 July 2017. We considered these comments and have included our response after each point:

2.8 *It is stated correctly in the Schedule 5 Notice response that the Development Advice Map zone designations in respect of the site are related to tidal flood risk. Based on the Flood Risk Map Trearddur Bay to the south west of the site benefits from flood defences. It is understood that Flood Zones 2 and 3 as shown on the flood risk map take no account of the presence of flood defences. Based on the flood risk map the drainage ditch which runs through the centre of the site has a less than 1 in 1,000 year annual probability of being inundated by flood water from Trearddur Bay entering the ditch upstream of or at the site irrespective of the presence of the flood defences at Trearddur Bay. On this basis we disagree with the statement made in the Schedule 5 Notice that the open channel through the site conveys flood waters from overtopping/tidal events along Lon Isallt and consider that the there is no significant risk that the drainage ditch running through the site will convey flood water overtopping the flood defences at Trearddur Bay.*

We disagree with the content of this paragraph. Although the ditch may not convey saline waters during lesser tidal flood events in the bay, overtopping does occur along Lon Isallt and can/will enter the site and be conveyed by the watercourse prior to entering the Inland Sea. It is accepted that there is a degree of uncertainty regarding the exact volumes/extent of overtopped water on the site pre and post land-raising during a range of events including that of the 0.1% extreme sea level in 2117 (including wave allowances). The Isle of Anglesey County Council carried out Coastal defence improvements works in 2008 which included flood management works along Lon Isallt; this is documented in the Project Appraisal Report b Faber Maunsell Ltd. It is likely that extreme events (as required under TAN15) would exceed the design of the flood management work, particularly when the effects of sea level rise due to

climate change are taken into account. The attached e-mails show flooding along Lon Isallt in 2002 pre-scheme and flooding in 2014 post.

We therefore cannot agree with the statement until such time that an assessment has been carried out.

2.9 Notwithstanding the above, raising land levels in a tidal floodplain has the potential to displace momentarily extreme waves or extreme tidal surges to areas which may not have otherwise flooded if the land raised is in proximity to the open sea in an area experiencing rapid inundation due to tidal flooding. During an extreme tidal flooding event it is considered likely that the area in the vicinity of site will inundate from the inland sea to the east. The Inland Sea will inundate from St Georges Channel from Beddmanarch Bay to the north or from Cymyran Bay to the south east. Bedmanarch Bay and Cymyran Bay are situated approximately 4.2km south east and 2.2km north north east from the site respectively at their closest points. Water inundating the Inland Sea from Bedmanarch Bay would have to pass beneath the A5, A55 and Chester to Holyhead Railway bridges which are approximately 2.2km north north east of the site. Water inundating the Inland Sea from Cymyran Bay would have to pass beneath the B545 Four Mile Bridge structures which is approximately 2.2km south east of the site. It is considered that even in the event of a breach or overtopping of these structures significant impedance of extreme waves and tidal surges will be provided by these structures.

We would tend to agree that the probability of failure (breach) of the Stanley embankment (A5/Railway crossing) and the A55 crossing occurring would be extremely low. However the failure (or overtopping) of the B545 Four mile bridge is a potential source during the next 100 years. We would therefore advise that tidal flooding from this source should be considered further.

***2.10** Based on the distance between the site and St George's Channel to the north and south east of the site from which extreme floods are likely to inundate and the presence of structures crossing the Inland Sea between the site and St Georges Channel it is considered that there is no significant risk that the area in the vicinity of the site will experience rapid inundation due to tidal flooding. The area of land raising at the site will be insignificant in comparison to the area of the Inland Sea and St Georges Channel. On this basis it is considered that there is no significant risk that the land levelled and raised by the deposit of waste at the site will increase the risk of tidal flooding elsewhere.*
No evidence has been provided to substantiate the contents of this paragraph. To adequately address the concern that the land raising could increase the risk of flooding elsewhere, it is suggested that the 1D-2D hydraulic modelling exercise as previously referred should be carried out. Downstream boundary conditions based on Inland Sea and any differential in peak tide heights/times should be included. A pre/post model run would show and differences in water

levels/extent on and adjacent to the site. We would be happy to discuss the scope of such an assessment in more detail should that be required.

2.11 *Based on the above assessment it is considered that the finished scheme resulting from the land raising and levelling operations at the site will not increase flood risk elsewhere. It is considered on this basis that further assessment of the risk posed to flooding as part of the WRP is not necessary.*

This statement is speculative and not substantiated by evidence. Evidence (flood modelling work/Flood Consequence Assessment) should be provided to support such a statement.

Overall the Schedule 5 response and revised waste recovery plan submitted on 26 July 2017 do not address our concerns relating to the increased risk of flooding in the surrounding area.

On 11 August 2017, we informed the applicant of our conclusions to the information provided in response to the Schedule 5 Notice. We gave the applicant the opportunity to provide further information to address our concerns and requested that this information be submitted by 29 August 2017.

On 29 August 2017, the applicant provided clarification in regards to the information previously submitted in relation to flood risk.

We considered these comments and included our response after each point: Relevant points have been included below:

8. It was the intention in Paragraph 2.8 of the Schedule 5 response to assess as insignificant the risk that the drainage ditch running through the site will convey tidal flooding water originating from Trearddur Bay overtopping the flood defences at Trearddur Bay which would be conveyed to the site and be concurrently in continuity with the open sea in Trearrdur Bay. Under such conditions it would be possible that the ditch would inundate rapidly and there
would be the potential, however small, for tidal floodwater to be diverted by the raised land levels in the tidal floodplain at the site to another property during the inundation of the area. We acknowledge your acceptance that the ditch running through the site may not convey saline waters during lesser tidal flood events. For the avoidance of doubt no attempt was made in Paragraph 2.8 of the Schedule 5 Response to rule out the possibility that individual
waves may overtop the flood defences at and in the vicinity of Trearrdur Bay during extreme storm events. It is considered that in such an event any saline water which may be conveyed along the ditch towards the Inland Sea would not be in hydraulic continuity with the sea hence in this case there is no significant risk that any loss of tidal floodplain at the site will increase flood risk due to tidal flooding elsewhere.

TAN15 requires that flooding elsewhere is considered for events up to and including the 0.1% probability tidal event, plus an allowance for climate change. Our information suggests that in such an event, 'still water levels' would be above the level of Lon Isallt - putting the site in direct hydraulic continuity with the coast.
This paragraph seems to assume that the ditch which conveys flows towards the Inland Sea has sufficient capacity to pass the wave over-toping volume during an extreme event. No evidence is provided to justify this assumption. If the capacity of the ditch is exceeded, then flood water would travel overland; in such circumstances we would be concerned that the land raising would displace/re-direct flood flow potentially increasing flood risk elsewhere.

12. In a typical tidal flooding scenario where the water impacting the land is in hydraulic continuity with the open sea (and the situation can be reasonably approximated to a steady state), the removal of tidal floodplain storage by raising land levels in a particular location will not raise flood levels compared to the pre development situation unless the volume of flood storage removed comprises an appreciable fraction of the volume of water in the open sea. This does not apply when comparing the volume of material which will be placed at the site with the volume of water in the open sea.

The site is not on the open coast.

13. In order to consider the risk of tidal flooding from this source further it would be necessary to assume that the structures taken into account in Paragraph 2.9 of the Schedule 5 Response would not provide significant impedance of extreme waves and tidal surges. On this basis it would be necessary to assume that these structures including their supports and embankments would be destroyed almost completely. It would be necessary to assume alsothat any initial surge or extreme wave could propagate through at least 2.2km of tortuous tidal flats and channels to the Inland Sea and implausibly turn almost back on itself within the Inland Sea to inundate the site. It is considered that such a scenario is physically implausible and as such is considered further. We trust that this approach is acceptable to you.

This can only be demonstrated by a 2-dimensional hydraulic model with 3 tidal cycles coinciding with a breach during the 0.5% and the 0.1% AEP +cc. A breach assessment of the Four Mile bridge should consider a breach width of between 20 and 50m or just overtopping and agree a length of failure of the paraphet walls.

14. It is considered that even in the unlikely event of the overtopping or breach of the Four Mile Bridge any initial tidal surge or extreme wave will dissipate through the Inland Sea raising generally the levels in the Inland Sea. As discussed above and as

assessed in Paragraph 2.10 of the Schedule 5 response the development will not increase flood risk elsewhere as the water in the Inland Sea will be in hydraulic continuity with the open sea. On this basis it is considered that sufficient information and assessment has been provided to date for NRW to be satisfied reasonably that the risk posed by tidal flooding elsewhere as a result of the development will not increase.

No idea on volumes/rates to see if the channel is sufficient and the impact on overland flows have been presented.

15. It is considered that there is ample evidence to support the conclusion in Paragraph 2.10 of the Schedule 5 Response which as discussed above follows on from the information presented in Paragraph 2.9. The conclusions in Paragraph 2.10 of the Schedule 5 Response are based on a reasoned assessment of the geometry of the coast line in respect of Treaddur Bay and the Inland Sea, due consideration of significant structures which may influence the flow of water towards the site and careful consideration of the mechanisms by which the land raising work may pose a risk of flooding elsewhere. Consistent with the information provided previously it is considered that there is adequate information available for reasonable satisfaction that the development will not increase flood risk elsewhere.

We would expect that the adequate information would be some modelling showing the pre/post proposals for a range of return periods.

16. As discussed above the potential for the development to increase flood risk elsewhere would exist only in the highly complicated and transient situation where an extreme wave or tidal surge from the open sea would impact initially an exposed and unprotected area of land and where the extreme wave or tidal surge is in hydraulic continuity with the open sea. As discussed in respect of Paragraph 2.9 of the Schedule 5 Response there is no significant risk of this occurrence at the site. There would be significant challenges associated with the parameterisation of such a scenario using many of the commercially available and commonly used 1D and 2D hydraulic modelling packages. There is no guarantee that such a scenario can be modelled in a robust and defensible manner.

When we assess flood risk TAN15 stipulates extreme events which need to be considered. These extreme sea levels include surges and should also include wave action if applicable. Trearddur Bay does suffer from waves over topping. Modelling packages are available and the inputs and methodologies adopted should be agreed with NRW prior to constructing any hydraulic model.

In conclusion to the clarification provided, overall our concerns on flood risk remain. We do not feel that the applicant fully grasps the impact the raising of the land could have on third party flood risk (nor if the proposed dwellings would be in line with TAN15's requirements for highly vulnerable development

(houses) to be considered acceptable). The statements/assumptions made are based on the applicant's opinion and not supported by any calculations/modelling work. They have not stated any estimated extreme sea levels (which are some 5m AOD) nor wave overtopping.

On 31 October 2017 the applicant requested the following information:
'*Project Appraisal Report by Faber Maunsell Ltd in respect of coastal defence improvements carried out during 2008 along with pre and post scheme flooding scenarios. We would be grateful also to receive any other flood modelling information held by NRW pertaining to the Morfa site including where available modelled depths, extents and flows for the various return periods including any allowances for climate change and GIS outputs where available.'*

On 07 November 2017, we advised the applicant of the following:
"The *Project Appraisal Report by Faber Maunsell Ltd* was commissioned by the Isle of Anglesey County Council who were the promoters of the coastal improvement scheme. As such, please contact the IoACC (Highways department) to obtain.

With regards to flood modelling information pertaining to the Morfa site, the flood zone mapping is based on projected extreme sea levels for the area. To obtain the sea levels a formal data request should be made for product 4 requesting nodes 988 & 996.

NRW are aware of two previous studies carried out by Weetwoods in 2006 and Datrys in 2016, both commissioned Eden Homes. NRW's predecessors (Environment Agency Wales) did not accept the work in 2006 whilst the 2016 was not completed and omitted suggested flood scenarios which are required for consideration in any FCA".

On 27 November 2017, the applicant requested that the determination date be extended until 31st January 2018 to allow them the opportunity to review the flood information that we suggested that they should obtain in order to complete flood modelling. Once the applicant had obtained this information they would confirmed that they would contact us in order to arrange a meeting with our hydrological specialists to discuss the scope of their response. We agreed to extending the determination date and confirmed that a meeting would be arranged with our flood risk specialist.

On 18 January 2018, the applicant met with flood risk specialists to agree the information to be used in flood modelling.

On 29 January 2018, the applicant requested an extension to the determination deadline until 30 April 2018, in order to agree the parameters of the modelling and to provide this to us. On 31st January 2018, we agreed to the extending the

determination date and advised the applicant that the flood modelling must be submitted to us by16 March 2018.

On 27 February 2018, the applicant advised us that flood modelling would not be submitted. The applicant proposed to revise their waste recovery plan to include a reduced area of the site to deposit the waste, using a reduced amount of waste.

On 08 March 2018, we advised the applicant that there is still the concern of flood risk to the surrounding area. Without evidence presented in support of any land raising/infilling, Natural Resources Wales cannot determine if the proposal would be acceptable in not leading to an increased risk of flooding elsewhere. For this site, we would expect any proposal presented to us to have considered a range of tidal events up to and including that of the 0.1% annual exceedance event (1 in 1000) with an allowances for climate change impacts. Tidal flood risk is possible from two sources with differing times to peak (time of High water) and possibly peak heights would may differ. It is suggested that the main flood risk concern which will need addressing is that of flood waters entering and flowing across the site from west would be impeded by the raising of the levels; this is likely to increase flood risks elsewhere.

Adopting the precautionary principles taken for flood risk, we would therefore advise that only by modelling the site could we accept that impact on flood risk that any raising of site levels could have.

During the determination of the application we have repeatedly requested flood modelling from the applicant in order to demonstrate that the activity would not increase the risk of flooding in the surrounding area, in line with TAN15 and Welsh Government’s opinion on residential developments in flood risk areas.

This information has not been provided. Therefore, we cannot agree that this activity will not increase the risk of flooding in the surrounding area.

6 Other relevant issues

As we do not consider that the waste recovery plan demonstrates recovery we have not fully assessed the rest of the application. This includes assessing the risks from the activity of depositing the waste. We have included information in this section to ensure that the applicant is made aware of other issues that need to be considered, should they wish to submit an application to us in the future.

As included in Sections 5.3.4 and 5.3.5 above, the applicant has not provided suitable evidence to demonstrate that the finished scheme will not increase the risk of flooding in the surrounding area. This risk may have an impact on designated sites within proximity to the proposed site. The risks to these designated sites have not been fully assessed as the primary objective of the determination of this permit has been to consider whether the activity is for recovery purposes.

6.1 Risk assessment

Under the Environmental Permitting Regulations, we are able to ask the applicant for further information if we have concerns and to help us to make a decision.

DEFRA core guidance states:

Requests for more information

6.17 There may be circumstances where the regulator needs to serve a notice asking for more information it needs to determine the duly-made application (Schedule 5, Part 1, paragraph 4).

6.18 The regulator should only require further information where that information is essential to allow the application to be determined. Any request for further information should meet at least one of the following criteria. The information must be necessary to:

assess whether the proposal meets any directive or other requirements, or determine the appropriate permit conditions to impose.

6.19 This information might, for example, comprise:
information to understand sufficiently the environmental impact or risk posed, or information to understand sufficiently the proposed operations.

For Tier 2 bespoke applications, as part of the determination of the permit application, the applicant only needs to address the elements of the location criteria of the standard rule permit that it could not meet. For this application this included Beddmanarch-Cymyran (SSSI). However, given the risk of flooding in the surrounding area from the finished scheme, consideration to other designated sites close to the proposed activity should also be given.

The applicant should consider the potential impact that the proposed activity may have on these sites and how this will be mitigated. This should include the impact of the finished scheme and of the risks associated with the activity of depositing waste (i.e. emissions including dust and noise etc.).

The risk assessment submitted with the application includes Beddmanarch-Cymyran - Sites of Special Scientific Interest (SSSI) as a sensitive receptor. The following designated sites are also within proximity to the proposed site and have not been included in the risk assessment:
- North Anglesey Marine/ Gogledd Mon Forol - Special Area of Conservation is within 1km and lies to the west of the site,
- Anglesey Terns / Morwenoliaid Ynys Môn - Special Protection Areas which lies to the East and the West of the site and;
- Part of the proposed site is within an Area of Outstanding Natural Beauty – Ynys Mon/ Anglesey.

There is also an un-named watercourse flowing through the site in a north to south direction.

6.2 Section 28I of the Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act (CRoW) 2000

In accordance with the requirements of Section 28I of the Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act (CRoW) 2000, under S28G, as the Regulator we have duties to protect and enhance SSSIs. This applies to all proposed permissions within a SSSI, and to operations outside the SSSI boundary which are likely to damage its special features.

6.2.1 Impact on Beddmanarch-Cymyran - Sites of Special Scientific Interest (SSSI)

Beddmanarch-Cymyran (SSSI) lies 50m to the east of the site. This site has four special features:

- Marine biological interest including all three British species of eelgrass Zostera spp.
- Salt marsh vegetation comprising glasswort, common saltmarsh-grass, thrift, lax-flowered sea-lavender and sea rush. The uncommon golden samphire occurs in salt marsh communities and on parts of the rocky shoreline.
- Coastal dune heath, comprising heather with sand sedge, at Traeth y Gribin and Cymyran, and;
- Overwintering water birds including ringed plover, curlew, greenshank, red-breasted merganser, goldeneye and brent geese

There are many factors that could damage the special features at Beddmanarch – Cymyran if they are not properly managed. These are the ones we regard as most important:

Tidal regime: The constriction of the tides at Four Mile Bridge and the Stanley Embankment produced a unique tidal environment in the “Inland Sea” with an oscillating fortnightly tide which means that there are often areas of mudflat available to birds when it is high tide elsewhere. Alterations to this, for instance by closure of the channels, could affect marine species in the site, by prolonging their submerged or dry periods. Equally, the removal or modification of these constrictions might restore the previous natural tidal regime but would require careful consideration. Increases in tidal flow could wash out finer sediments, changing muddy areas (preferred by eelgrass) to sandier sediments and altering muddy gravel communities. The water flume from the Stanley embankment is also an important feeding area for arctic terns.

Water quality (sediment levels): The sheltered waters of the Inland Sea offer little opportunity for wave generation and are therefore generally low in suspended sediment. This encourages the development of eelgrass.

Although the risk assessment considered some of the risks from the activity to the designated site, it does not consider all the risks from the finished scheme. The proposal increases the risk of flooding to the surrounding area. If this were to occur this may impact and damage the SSSI. Also, there is an increased risk of siltation leading to potential loss of saltmarsh to more terrestrial habitats.

More information is required from the applicant to demonstrate how the risks to the SSSI would be mitigated. The environmental risk assessment submitted with the application does not include the risk of siltation or flooding on the SSSI or include measures on preventing or mitigating these risks.

Further information is required in order for us to consider that there are no risks from the activity on the designated site.

6.3 Habitats Regulations Assessment

The Conservation of Habitats and Species Regulations 2017 enable the designation and protection of areas that host certain important habitats and species out to 12 nautical miles offshore. These European protected sites are known as:

- Special Areas of Conservation (SACs) for the protection of certain habitats and species
- Special Protection Areas (SPAs) for the protection of certain wild bird 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 2017. This means that we will carry out a **Habitats Regulations Assessment (HRA).**

In Wales and the UK, Ramsar Sites (identified under the Ramsar Convention) are also afforded the same level of protection as fully designated Natura 2000 sites. Together, these international sites are referred to as European Sites.

6.3.1 Impact on Anglesey Terns – Special Protection Area (SPA)

The proposed site is within 100m of Anglesey Terns (SPA). The applicant has not acknowledged or considered this designated site in their application, or the risks posed from the proposed activity.

Whilst the proposed activity does not appear to have any direct impact on the nearby designated sites it is possible that it will have indirect effects due to the impact on water courses draining into the SPA/SSSI which appear to be being buried beneath the waste without any indication of how they will be managed. Although not an SSSI issue, these streams drain land on the west side of the road and this need will continue. In addition to this the loss of sediment laden water into the SPA/SSSI could result in siltation of upper tidal areas within the SSSI with loss or change of habitats.

More information is needed from the applicant regarding these aspects and the applicant should identify suitable measures to prevent loss of sediment either into the Inland Sea or into Trearddur Bay, even at time of heavy rainfall.

In accordance with the Habitat Regulations, a Habitat Regulations Assessment (HRA would need to be completed.

6.3.2 Impact on North Anglesey Marine/ Gogledd Mon Forol – Special Areas of Conservation (SAC)

The proposed site is within 1km of North Anglesey Marine/ Gogledd Mon Forol – Special Areas of Conservation. The applicant has not acknowledged or considered this designated site in their application, or the risks posed from the proposed activity.

The applicant should address this designated site in their environmental risk assessment and consider the risks to this site from the activity.

6.4 Application

In addition to Section 5 – Key issues above, the waste recovery plan and other supporting information provided with the application is inaccurate in places and does not suitably address or consider other risks from the activity. These are detailed below.

6.4.1 Surface water receptors

The application contains limited consideration of surface water receptors from the activity.

The application should confirm material placement surrounding and over the surface water feature identified within the permit boundary. The potential risks to controlled waters associated with this activity should then be considered.

6.4.2 Proposed site

Section 1.2.7 of the waste recovery plan states that:
" The site is within a Zone 3 groundwater source protection zone and a minor aquifer high groundwater vulnerability zone. Aquifer maps show the site has a superficial deposits designation of Secondary A."

This is incorrect as the site is not within a source protection zone.

6.4.3 Waste material

The WRP should also include methods for basic characterisation of waste. In addition to this, the WRP should clarify the proposed sampling methodology for material characterisation. Industry practice of 1 sample per 250m^3 is generally accepted to be suitable for material characterisation. Proposed sample analysis should also be confirmed.

6.4.4 Site condition report

Site protection must be addressed throughout the life of an environmental permit, so if contamination is caused it must be dealt with quickly and effectively. At the permit application stage a site condition report must be submitted with bespoke applications. From reviewing the site condition report in accordance with our guidance *"H5 Site condition report guidance",* we have noted the following under the relevant headings included in the site condition report template:

Condition of the land at permit issue:

a) Environmental setting including geology, hydrogeology and surface waters
A brief summary of geological and hydrogeological conditions is provided. No site plans, maps included within report. Hydrology section is limited.

No discussion around inferred groundwater flows or levels.

b) Pollution history including:
- *pollution incidents that may have affected land*
- *historical land-uses and associated contaminants*
- *visual/olfactory evidence of existing contamination*
- *evidence of damage to existing pollution prevention measures*

This section does not appear to be accurate when comparing to MyMap (NRW's internal database). MyMap indicates 3 past incidents within the permit boundary and 2 along the southern site boundary within the designated SSSI.

Historic maps should be included within reporting to confirm and evidence the sites past use.

The report refers to a site walkover. Details of the walkover including photographs should be provided.

c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available)

Refer to above.

d) Has the applicant chosen to collect baseline reference data?

Applicant should justify decision for not collecting baseline data.

7 Environmental issues: likelihood of pollution

7.1 Risk to designated sites

For Tier 2 bespoke applications, as part of the determination of the permit application, the applicant only needs to address the elements of the location criteria of the standard rule permit that it could not meet in their environment risk assessment. For this application this included Beddmanarch-Cymyran (SSSI). As stated above, had we considered that the activity was for recovery purposes, it is reasonable to say that we would have also requested further information from the applicant on addressing the risks from the activity and measures used to mitigate these.

An environment risk assessment must include the environmental risk of the proposals including the risk under both normal and abnormal operating conditions. We need to be satisfied that the applicant's assessment of the risk is sufficiently robust. In particular, any assumptions that the applicant has made about its proposals must be clearly justified. We assess the application and the adequacy of the impact assessment including whether the control measures proposed by the operator are appropriate for mitigating the risks and their potential impact.

As included in Section *6.1 Risk assessment* above, although the risk assessment considered some of the risks from the activity to the SSSI, it does not consider all the risks from the finished scheme. The proposal increases the risk of flooding to the surrounding area. If this were to occur this may impact and damage the SSSI. Also, there is an increased risk of siltation leading to potential loss of saltmarsh to more terrestrial habitats.

More information is required from the applicant to demonstrate how the risks to the SSSI would be mitigated. The environmental risk assessment submitted with the application does not include the risk of siltation or flooding on the SSSI or include measures on preventing or mitigating these risks.

Further information is required in order for us to consider that there are no risks from the activity on the designated site.

7.2 Risk to watercourse

There is an un-named watercourse flowing through the site in a north to south direction. The WRP submitted 26 July 2017, states that:
"Material will not be stockpiled close to the site boundary or close to the drainage ditch running through the site to minimise the risk of sediment entering the watercourse or inland sea". However, the WRP does not demonstrate adequate

suspended sediment control measures that will be used to ensure that these do not go into the watercourse.

The WRP should also confirm material placement surrounding and over the surface water feature identified within the permit boundary. The potential risks to controlled waters associated with this activity should then be considered.

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