

# TEIGNBRIDGE DISTRICT COUNCIL

## EXECUTIVE COMMITTEE

3 NOVEMBER 2020

<b>Report Title</b>	<b>MARINE DREDGE DISPOSAL (Exmouth Marina)</b>
<b>Purpose of Report</b>	To update the Committee in regard to a Marine Licence
<b>Recommendation(s)</b>	<b>The Committee RESOLVES to:</b>  <b>(1) Maintain an existing objection to Marine Licence MLA/2016/00372/2 pending resolution of outstanding issues; and</b> <b>(2) Recommend that the Marine Management Organisation support properly representative sediment testing methodologies be incorporated within License criteria.</b>
<b>Financial Implications</b>	Limited implication if recommendation agreed Martin Flitcroft – Chief Finance Officer Tel: 01626 215246 Email:martin.flitcroft@teignbridge.gov.uk
<b>Legal Implications</b>	As set out at paragraph 2.3 Paul Woodhead - Legal Services Team Leader and Deputy Monitoring Officer Tel: 01626 215139 Email: paul.woodhead@teignbridge.gov.uk
<b>Risk Assessment</b>	Limited implication as determining Authority is the Marine Management Organisation Graeme Smith – Coastal Officer Tel: 01626 215748 Email: Graeme.smith@teignbridge.gov.uk
<b>Environmental/ Climate Change Implications</b>	Climate Change – None Environmental – Identified within Background Paper William Elliot / Climate Change Officer Tel: 07920232862 Email: william.elliott@teignbridge.gov.uk
<b>Report Author</b>	Graeme Smith – Coastal Officer Tel: 01626 215748 Email: Graeme.smith@teignbridge.gov.uk
<b>Portfolio Holder</b>	Cllr Jackie Hook
<b>Appendices</b>	
<b>Background Papers</b>	Paper 1 – Consultation response submitted in respect of MLA/2016/00372/2 on behalf of Teignbridge District Council.

## **1. PURPOSE**

- 1.1** To update the Committee in regard to a Marine Licence (MLA/2016/00372/2) determined by the Marine Management Organisation to consent the dredging of Exmouth Marina and to deposit the resultant waste off shore from Teignmouth.

## **2. REPORT DETAIL**

### **2.1 Background**

The consent to dredge and deposit marine sediments is regulated under the Marine and Coastal Access Act 2009 (MACAA) and determined by the Marine Management Organisation (MMO) as the relevant Authority through the award of a Marine Licence.

Exmouth Marina Ltd applied to the Marine Management Organisation to dredge the marina basin and dispose of the silt at sea.

The License originally allowed the deposition of marina wastes into an existing disposal site close to and actually on the inter-tidal foreshore (the beach) between Eastcliff and Sprey Point, Teignmouth. The original consultation process did not include Teignbridge District Council in whose area the disposal site is situated, or the Town Councils of Teignmouth and Dawlish.

The Sprey Point disposal site is well known as this site is also used by the Teignmouth Harbour Commission (THC) to deposit clean sands and gravels dredged as part of ongoing maintenance of the shipping approach channel to the Port of Teignmouth. The dredged sands and gravels being deposited are derived from the same sediment cell as the beach. This local maintenance process has been supported by the Council as it is thought to help 'feed' or recharge the beach with like for like material.

Given widespread concern following the deposition of marina silts (reported in the press and social media outlets as 'black sludge') on the foreshore, the MMO suspended Exmouth Marina's license and there has been a process of scoping reports, characterisation reports and licence variation requests to lift

the suspension and allow the marina silts to be deposited in an alternative site around 7km off shore from Teignmouth.

The Council has sustained a consistent approach throughout this process, maintaining an objection to the proposals until clarification of concerns raised have been received or remedied. The most recent consultation response highlighting principal concerns is presented as Background Paper 1.

In September 2020 the MMO determined a characterisation request and variation to the existing License, lifting a suspension and consenting Exmouth Marina Ltd to restart dredging operations. This was accompanied by the re-opening of a disused off shore disposal site approximately 7.7km off Teignmouth as being suitable to receive the resultant waste from the marina.

## **2.2 Financial**

Limited implication if recommendation accepted.

## **2.3 Legal**

There are no legal implications arising from this report other than the risks (financial and otherwise) and resource implications associated with Option 2.

## **2.4 Risks**

Limited implication if recommendation accepted.

## **2.5 Environmental/Climate Change Impact**

Climate Change – No or limited impact

Environmental – Environmental implications associated with this committee report have been identified within the attached Background Paper.

## **3. OPTIONS**

Marine Licenses are determined under the Marine and Coastal Access Act 2009 (MACAA). This Act does not have an appeal processes for third parties (considered to have sufficient interest) other than by way of a Judicial Review

Three options

(Option 1) Do nothing - The relevant Statutory Agency, the MMO, determined an application and granted a Marine License it deemed compliant with the MACAA and advice from the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) as the Governments advisors, and under the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) guidelines.

(Option 2) Undertake Judicial Review (JR) – Challenge the basis on which the determination was judged. Principally that best practice was not applied in that the sampling regime and methodology whilst being judged by MMO/CEFAS to be compliant with OSPAR guidelines does not sufficiently represent the material to be dredged and disposed of, and that the desk based dispersion modelling did not investigate post disposal effects in adequate detail.

This would instigate a challenge that the advice given to the MMO by CEFAS was inadequate and that the methodologies for sampling, analysis and modelling were not fit for purpose, although these met the existing legal standards OSPAR Guidelines. The JR process would not necessarily consider the merits of the individual License decision but whether the decision was made lawfully and that the process is fit for purpose. This is a two stage process, initially a High Court Judge will determine whether a case is arguable, and if a matter is granted permission this then could proceed to a substantive hearing. It is likely that detailed legal arguments and documentation would have to be lodged at Court within a maximum of a three month period from the decision date, 10 Sept 20 (i.e. by early Dec 20). Initial advice indicates that a resource of at least £50,000 would be needed to see the process through to any meaningful stage.

(Option 3) Lobby for additional clarification of sampling methodology and determinates, and feedback to consultation points and objections raised. This could be joint approach by the Council through available means such as the Local Government Association – Special Interest Group for the Coast, in conjunction with the local Member of Parliament.

### **Recommendation - Option 3**

As part of Licence MLA/2016/00372/2 the MMO has requested of the applicant that a new sample plan and analysis must be submitted by May 2021, and subsequently repeated every five years.

Notwithstanding that the MMO considers that the existing sampling process was compliant with OSPAR obligations, there may be an opportunity to persuade the MMO that a more representative sampling regime be instigated by May (and/or that date brought forward). Any additional request could potentially be challenged by the applicant who has complied with the existing requirements of the regulator.

## **4. CONCLUSION**

The MMO as the determining Authority has awarded a Marine Licence for the dredging of silts from Exmouth Marina to be deposited off-shore from Teignmouth. The Committee is recommended to note the concerns as previously raised by the Council (and presented as Background Paper 1) and undertake Option 3 as above.

**Teignbridge District Council Executive Committee November 2020  
Background Paper - Marine Dredge Disposal**

Copy of Consultation response submitted to the Marine Management Organisation in respect of MLA/2016/00372/2 on behalf of Teignbridge District Council.

**MLA/2016/00372/2**

The following is presented as an Officer response on behalf of Teignbridge District Council to an application to vary a Marine License and associated application to characterise (re-open) a potential dredge disposal site at PO050. Comments should be read across both applications.

This Council previously objected to a proposed Marine License variation MLA/2016/00372/1 in which we highlighted concerns regarding sampling methodology and sampling results in respect to these works. This challenge was re-emphasised in July 2019 in response to a scoping exercise by MarineSpace on behalf of Exmouth Marina Ltd (document ref J/6/52/18) and copied to the MMO.

This challenge, in part to the MMO and CEFAS, remains outstanding

**Sampling Methodology**

The variation application does not address one of our key concerns namely that the sampling methodology should have included core sampling within the whole depth of the proposed dredge, rather than just relying on analysing material from surface or near-surface grabs which we have consistently indicated may not be representative of the consolidated sediments at depth within the body of the marina silts. It is recognised that this is however a challenge of best practice with CEFAS and the MMO as the advisors and regulators rather than the applicant. Without knowing what is being dredged it is impossible to be able to determine permission to dredge.

The practice of only taking surface grab type samples and agglomerating these to run a single suite of analysis does not give any confidence that the sampling methodology is fit for purpose. The identification even within a single analysis run of elevated levels of chromium, copper and zinc above Action Levels and elevated levels of PAHs should at the very least necessitate the requirement for a more comprehensive sampling and analysis regime.

Our request for a more representative suite of samples (numbers of locations and range of depths through material to be dredged) would appear to be supported by the underlying Revised OSPAR Guidelines for the Management of Dredged Material

***5. DREDGED MATERIAL CHARACTERISATION***

*5.2 If dredged material is so poorly characterised that proper assessment cannot be made of its potential impacts on human health and the environment, it shall not be dumped.*

***7. DREDGED MATERIAL SAMPLING***

*7.2 A survey of the area to be dredged should be carried out. The distribution and depth of sampling should reflect the size and depth of the area to be*

*dredged, the amount to be dredged and the expected variability in the horizontal and vertical distribution of contaminants. Core samples should be taken where the depth of dredging and expected vertical distribution of contaminants suggest that this is warranted.*

*7.3 The following table gives an indication of the number of separate sampling stations required to obtain representative results, assuming a reasonably uniform sediment in the area to be dredged:*

<i>Amount dredged (m3)</i>	<i>Number of Stations</i>
<i>Up to 25 000</i>	<i>3</i>
<i>25 000 - 100 000</i>	<i>4 - 6</i>
<i>100 000 - 500 000</i>	<i>7 - 15</i>
<i>500 000 - 2 000 000</i>	<i>16 - 30</i>
<i>&gt;2 000 000</i>	<i>extra 10 per million m3</i>

*The number of sample stations can also be determined on the basis of the area to be dredged. The number of sample stations should take account of the exchange characteristics of the area; more samples may be required in enclosed and semi-enclosed areas and less in open areas.*

This clearly indicates that there needs to be a proper assessment, which requires to include a suite of horizontal and vertical (core) samples, from a minimum of three sites with a likelihood that there should be an increased number being that this is related to an enclosed area.

## **Sampling results**

### *1.5. Consideration of Alternatives*

*Terrestrial disposal and other potential alternative disposal options  
The sediment dredged from Exmouth Marina would not be appropriate for other disposal options such as beach nourishment / land reclamation due to its nature and the volumes proposed.*

This statement appears to now concede that the same material shouldn't have been previously placed on the inter-tidal beach at Sprey Point (PO070) where material is known to nourish Teignmouth Beach, but also from where the material was released into the local marine environment, as is the intention of the current application.

*Alternative marine disposal site  
Following sampling undertaken by Cefas on material from within Exmouth Marina, results showed that levels of determinands were slightly elevated above Cefas Action Level 1 but not so elevated as to cause concern*

### *6.4.1. Sediment and Water Quality*

*...it is assessed here that the levels of determinands (slightly elevated above Action Level 1 but not cause for concern) recorded within the sediment samples means negligible effects are predicted on the chemical parameters of sediment or water quality as a result of the disposal of dredged material.*

These two statements by the applicant are not accepted and the MMO are requested to respond directly to the applicants' assumption that levels recorded above Action Levels can be dismissed as either not causing concern or are negligible

### **Sampling Summary**

It would be reasonable to assume that sediments at various depths throughout the basin will have been deposited at different times, including instances when the usages of TBT's and other chemicals were more prevalent, and that levels within consolidated deposits may be different from those on the surface which are potentially diluted by current conditions. Similarly particle sizes may vary throughout the core of material laid down within the basin, depending on historical local conditions, and that different size particles may behave differently when released as compared to the uniform size used in the model. At the very least these parameters should be investigated properly before determination of Characterisation or License Variation.

### **Consideration of Alternatives**

#### *Terrestrial disposal and other potential alternative disposal options*

It is not agreed that the lack of space for a 'storage lagoon' to enable a de-watering process to be explored is sufficient rationale to rule out the option of disposal to a terrestrial site. Given the reduction in volumes being requested then the use of dewatering facilities, including possible use of a flocculant unit, mounted on a lighter, pontoons or adjacent quayside should be investigated. This practice is understood to be successfully deployed in other locations. This would eliminate any need to dispose of marina derived waste into the marine environment, and would better address the requirement for the overall project to be considered under a waste hierarchy.

The OSPAR convention, EU Waste Framework Directive, Marine Policy Statement and the South Inshore Marine Plan all stipulate that tests of waste hierarchy and alternative disposal methodologies should be explored fully, whereas neither the Variation Application or site characterisation, evidence (or at least report) sufficient effort in this regard.

Options should be properly assessed and reported before any progress of the current application.

### **Modelling**

The applicant does not appear to present any new information regarding modelling therefore previous comments (to the informal process July '19) remain relevant and are repeated here:

The modelling uses a particle size of 64 microns – it is unclear from exactly where this figure was derived, i.e. whether this is taken from a single surface grab sample (as per earlier comments) or whether this is based on a properly representative suite of samples (historic or contemporary) taken from several locations across the basin

and crucially from a range of depths commensurate with the proposed dredge depths.

#### Model Limitations

Consideration was limited to a single day desk top exercise utilising a single driving factor of tidal current and does not accommodate either wind or wave dynamics which would be expected to be of influence in relatively shallow water (approx. 21-25m). CEFAS are able to indicate a reasonable confidence in their findings but also indicate that the model resolution was coarse and that a through calibration and validation process wasn't undertaken. Given the importance of the question, the direct relevance of wave and wind factors and the ten year period of the project then these omissions should be addressed.

#### CEFAS advice

'It is not possible to conclusively exclude the need for site specific surveys of PO050 at this stage, however I would expect surveys would only be required if an initial desk-based assessment identified considerable uncertainty or potential significant impacts.'

It would be reasonable to assume that for this expectation to be validated then there should at least be a rigorous certainty regarding the material being dumped and as highlighted earlier there is no confidence that surface sampling alone equates to any form of scientific rigour and that samples should be taken from several sites within the marina basin and throughout the depth of the projected dredge.

### **Human Environment – Commercial Fisheries and Other Users**

CEFAS previously urged the applicant 'to identify any local fisheries concerns early and encourage public consultation on the characterisation report before any disposal site is opened', this does not appear to have been undertaken to date with no reports of consultation being undertaken with local fishermen other than at Exmouth. The importance of the area should be reviewed with representatives from both the Teignmouth and Torbay fleets.

This section fails to recognise the local charter angling economy or aquaculture, both in close proximity to the site and potentially further afield in Lyme Bay.

#### Charter (and recreational) angling

The impact on charter angling businesses and recreational sea angling stakeholders using the multitude of wreck sites (as demonstrated through the INSPIRE portal) SW,S and SE of, and in close proximity to, PO050 requires to be properly assessed. This is an important sector within many smaller ports, including Teignmouth and the harbours of Torbay, and the perception of fishing over normally productive rough ground and adjacent wreck sites which could be blanketed with 10,000m<sup>3</sup> of waste material would obviously be commercially detrimental to this sector.

### **Aquaculture**

The proposed disposal site (PO050) is close to the Labrador Bay rope grown mussel array to the West and slightly further away from the Offshore Mussel arrays to the North East and the impact of suspended marina derived sediments on these

commercial operations requires to be properly assessed. This should include the influence of wind and/or wave factors on plume and sediment dispersion to evaluate the risk to these potentially susceptible receptors, especially given the elevated levels of heavy metals TBT, PCBs and PAHs in the (limited) sediment analysis, including some above CEFAS action levels.

*Human Environment - 5.4.1.1. Aquaculture*

*There are three existing offshore shellfish mussel farm lease sites within Lyme Bay and within the vicinity of the proposed disposal location (Figure 1.1). The closest site lies around 9 km northeast of the proposed disposal site PO050). There are also a number of other sites within western Lyme Bay, including Labrador Bay mussel farm, Torbay scallop nursery site and mussel farm and shellfisheries of the Exe and Teign Estuaries.*

*Commercial Fisheries 6.8.1. Aquaculture*

*It is possible that the disposal of dredged material at PO050 has the potential to impact upon aquaculture regions identified within western Lyme Bay due to an increase in suspended sediment and smothering. Cefas plume model results show that even 4 days after deposition the footprint of sediment dispersion does not interact with any of the aquaculture areas (Figure 6.1). Indeed, the boundary of the closest aquaculture area is approximately 5.9 km from the boundary of the 4 day sediment dispersal envelope.*

The Labrador bay site appears not to be fully recognised / impacts assessed / mapped on Figures 1.1 and Figure 6.1, and is approximately 2km from site not 5.9km as stated. This omission requires to be addressed before either application could be determined properly.

## **Marine Planning**

The applications do not properly consider, or report under, the relevant policies of the South (Inshore) Marine Plan, particularly in regard to Policies:

S-DD-2 Reuse of dredged materials

S-WQ-1 Water quality

S-FISH-2 Impacts on aquaculture

S-BIO-1 Biodiversity

## **Summary**

This Council recognises the Applicants desire to maintain the marina basin but believes that relevant and potentially significant information still needs to be provided, as above and in particular in relation to the sampling, to enable the regulators be able to make a properly informed determination. Until this is provided

and assessed this Council maintains an objection to the Characterisation and Variation to Licence.

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