

## Noeleen Roche

---

**From:** Licensing Staff  
**Subject:** Submission No. 401 Ashley Hayden  
**Attachments:** Submission re Dublin Bay SAC on Dumping at Sea.pdf

**From:**  
**Sent:** 27 August 2015 13:10  
**To:** Licensing Staff  
**Subject:** Submission Re: Dublin Port Company Alexandra Basin Redevelopment (ABR) Project Dumping at Sea Permit Application Ref No: S0024-01.

To whom it may concern,

Please find attached my submission re the application for planning permission by Dublin Port Company, Alexandra Basin Redevelopment Project for a dumping at sea permit, Ref No: S0024-01.

Yours sincerely,

Ashley Hayden

Carrig,  
Ballythomas,  
Gorey,  
Co. Wexford.  
Web: [www.anirishanglersworld.com](http://www.anirishanglersworld.com)

For inspection purposes only.  
Consent of copyright owner required for any other use.

---

This email has been scanned by the Symantec Email Security.cloud service.  
For more information please visit <http://www.symanteccloud.com>

---

**Dublin Port Company**  
**Alexandra Basin Redevelopment (ABR) Project**  
**Dumping at Sea Permit Application**  
**Ref No: S0024-01**

**Submission from: Ashley Hayden, [www.anirishanglersworld.com](http://www.anirishanglersworld.com)**

Dublin Port Company lodged an application for a Dumping at Sea (DaS) permit with the Environmental Protection Agency (EPA) on 13 July 2015 with a subsequent notice in the Irish Independent newspaper on the 31 July 2015. The proposed dumping is associated with the Alexandra Basin Redevelopment (ABR) project. The ABR project includes a capital dredging programme for Dublin Port with a proposal to dump the dredged material at a previously used offshore dump site on the Burford Bank.

This submission has been prepared by Ashley Hayden MSc BA, sea angler, conservationist and owner/content manager of the marine conservation and tourism angling promotions website [www.anirishanglersworld.com](http://www.anirishanglersworld.com). Online since April 2010, the An Irish Anglers World website currently attracts 6,000 unique visitors, 15% from the United Kingdom, who stay on the site for 2 minutes reading 2 pages (Google Analytics).

63,000 Irish people participate in recreational sea angling, of which based on national population densities in the region of 40% live in the greater Dublin area. Tourism sea angling, inclusive of domestic and overseas anglers, exclusive of the multiplier effect is worth nationally €127.5 million and 42% of sea anglers are concerned about bio – security (Tourism Development International 2013).

This submission from Ashley Hayden, [www.anirishanglersworld.com](http://www.anirishanglersworld.com) highlights a number of issues that require further clarification.

## 1. Newspaper Notice

Section 5A of the Dumping at Sea (Amendment) Act 2004 requires the applicant for a Dumping at Sea (DaS) permit to publish a notice in a newspaper within 21 days of submitting the application to the Environmental Protection Agency (EPA). The Act states that the purpose of this notice is: "*to bring the proposal to the attention of persons who may be affected*", a requirement for compliance with State obligations under the Aarhus Convention, in principal enabling public participation in decision making relating to the environment.

Regarding the Alexandra Basin Redevelopment (ABR) project, the Dublin Port Company published a notice in the Irish Independent on Friday 31 July 2015 to inform third parties of its intention to apply for a DaS permit, a copy also being available on the EPA website.

Section 5A (2) of the Dumping at Sea (Amendment) Act 2004 states that the notice must contain information on "*the characteristics, composition and approximate amounts of any substance [to be dumped]*". The notice includes some details of the composition (sand/silt) and approximate amounts of substance. The applicant also proposes to incorporate/dump gravel as an element of the process to use as an aid for capping contaminated sediments on the sea bed within the area of dumping. The proposed dumping of gravel has not been included within the newspaper notice.

Furthermore, the newspaper notice does not include details of the characteristics of the substance to be dumped. In particular, there is no information provided with regards the contaminated sediments to be dumped. These contain nickel at a concentration above the Marine Institute guideline for safe disposal at sea. This information is a characteristic of the material to be dumped that clearly should have been brought to the "*attention of persons who may be affected*". This omitted information would be useful in informing the decision of a person as to whether they should make a submission (or at least investigate further) due to being potentially affected.

I, Ashley Hayden, am suggesting that the omissions in the newspaper notice, highlighted within the narrative above are sufficient grounds to require a new notice and a restart to the notification process.

## **2. Possible Release of Contaminates from Dumped Material**

In Paragraph 6.2.4 of his Witness Statement to the An Bord Pleanála oral hearing, Adrian Bell states that under normal tidal conditions, 85% of the material dumped at the dump site on the Burford Bank does not remain on the dump site. This has to be interpreted to mean that under normal conditions 85% of the material disperses away from the dump site. It would seem logical, therefore, to suggest that the capping method suggested is at best going to retain around 15% of the dumped material.

According to the data in Appendix 11 of the ABR EIS, the sediment in the locations that have been classified as “*slightly/moderately contaminated*” are composed primarily of silt and sand. As indicated widely in the EIS, and as dictated by common sense, the sand particles will sink faster than the silt. Silt has a greater surface area compared to sand), so enabling the potential for higher concentrations of heavy metals and other probable contaminants such as PCB’s.

A question is raised therefore as to the efficacy of “gravel capping” which leads to another question, where do the re-mobilised contaminants go? Based on the data presented in Attachment B1 iii of the DaS permit application form (Sediment Chemistry Navigation canal) [sic], the sediments that have been classified as “*slightly/moderately contaminated*” contain appreciable levels of arsenic, cadmium, chromium, copper, nickel, lindane, and hexachlorobenzine (and possibly mercury, subject to clarification). Most of these are between the Marine Institute lower and upper guideline values, but it is re-iterated that nickel exceeds the upper guideline for a material to be considered safe for dumping at sea. Mercury toxicity is widely published. However, nickel is also a toxic metal, and one that is very mobile in the aquatic environment.

Section 5.2.5 (Marine Mammals) of the ABR EIS states that “*Consumption of contaminated prey items resulting from contaminants entering the food chain*” could have an adverse impact on marine mammals (this information is repeated in Section 3.2.3 of the ABR NIS). Apart from stating this as a risk, the EIS does not provide any further details for assessment. Dr Simon Berrow, expert witness on marine mammals at the An Bord Pleanála oral hearing answered a question regarding consumption of contaminants by marine mammals (Para 5.3.2) but considered the only risk to be from the highly contaminated material that is not being dumped at sea.

Section 5.4 of the ABR EIS on Benthic Ecology and Fisheries does not even consider the possibility of re-mobilisation of industrial contaminants as a potential issue. Clearly, the intention of the capping method is to trap the contaminated material under the gravel cap. This should have been fully understood by the author(s) of Section 5.4 of the EIS since benthic infauna living in contaminated sediments can act as potential vectors for movement of toxins to species occupying higher trophic levels (including fish and marine mammals).

It must be noted that man also occupies a high trophic level and is potentially at risk from any contaminants entering the food chain. For this reason, it is considered that information relating to the presence of nickel in the substance to be dumped should have been included in the newspaper notice published by the applicant to inform third parties of their intention to apply for a DaS permit (Section 1 of this submission).

The data presented in this section of my submission clearly indicates that there is uncertainty with regards the fate of nickel and other contaminants present in the “slightly/moderately contaminated” sediments that are proposed to be dumped within the Rockabill to Dalkey Island SAC.

Again, the attention of the EPA is drawn to the requirement of Article 6(3) of the Habitats Directive whereby an appropriate assessment must contain complete,

precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the work proposed on the protected site concerned. Under Article 6(3), the standard of certainty set by the Court is that the authority (i.e. the EPA) must be sure that no reasonable scientific doubt remains as to the absence of adverse effects on site integrity.

### **3. An Alternative Dump Site**

Paragraph 4.6 of the *Dumping at Sea Dumping Site Selection Guidance Note* (Aquafact, 2012) relates to the selection of candidate dump sites. This paragraph states that *“at least 2 candidate dumping sites should be selected to allow comparison of effects from the disposal of dredged material”*.

The Environmental Impact Statement (EIS) for the ABR project does not make clear whether consideration was given to an alternative dump site other than the Burford Bank.

In Section E.1 of the ABR Dumping at Sea Permit Application, the applicant states that *“The offshore disposal site to the west of the Burford Bank has been selected to keep the fine sands deposited at the site within the natural Dublin Bay sediment cell. Over time the fine sands will migrate from the site, particularly as a result of storm action and will remain part of the natural coastal processes regime of Dublin Bay”*. However, if the dredged material were to stay where it was, it would also contribute to the natural cycling of sediments within Dublin Bay. By artificially placing this material in the middle of Dublin Bay, it is not contributing to “natural” processes. Furthermore, if the dredge material were to be dumped further out to sea, for example, what difference would this loss of material from the closed system actually make to the natural processes of sediment movement within the Dublin Bay sediment cell? This does not seem to have been analysed or predicted.

I, Ashley Hayden, am suggesting that before the ABR project can commence at least one and possibly two alternative dumping site(s) should be investigated as per paragraph 4.6 of the *Dumping at Sea Dumping Site Selection Guidance Note*.

#### 4. ROCKABILL TO DALKEY ISLAND SAC

The Rockabill to Dalkey Island candidate Special Area of Conservation (SAC) was proposed by the then Minister for Arts, Heritage and the Gaeltacht, Jimmy Deenihan T.D., on 3 December 2012. SAC are established as a requirement of the EU Habitats Directive to conserve specific habitats and animal and plant species that are listed in Annex II of the Directive. The habitats, and animal and plant species for which the SAC was established to conserve are known as the qualifying interests for the site.

The Rockabill to Dalkey Island SAC, site code 003000, has two qualifying interests:

1. Rocky reefs
2. Harbour porpoise (*Phocoena phocoena*)

SAC and SPA (Special Protection Areas as established by the requirements of the EU Birds Directive) are known collectively as Natura 2000 sites. The Natura 2000 sites are designed to form a coherent network of protected sites for nature conservation that extends across the whole EU. Any plan or project that may adversely affect SACs and/or SPAs must undergo a process known as Appropriate Assessment.

The ABR project has the potential to impact on a number of SAC and SPA in Dublin Bay. The Dublin Port Company has undergone the Appropriate Assessment process with regards the ABR project and has produced a Natura Impact Statement (NIS) in addition to an Environmental Impact Statement (EIS). Of particular concern is the fact that the proposed dump site at the Burford Bank lies entirely within the boundary of the Rockabill to Dalkey Island SAC. This is the first application for a DaS permit for dumping at the Burford Bank since its inclusion within the SAC.

The National Parks and Wildlife Service (NPWS) is the State body with responsibility for the management of SAC and SPA. The NPWS produces the documentation required to manage the site. For the Rockabill to Dalkey Island SAC the two main documents are:

1. NPWS (2013a) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
2. NPWS (2013b) *Rockabill to Dalkey Island SAC (site code: 3000) Conservation objectives supporting document - Marine Habitats and Species*. Version 1. April 2013. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

These two documents contain the essential information required when assessing the impacts of a proposed plan or project on the qualifying interests of the SAC. NPWS (2013a) states that “A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site”.

With regards the harbour porpoise, NPWS (2013b) states that: “the size, community structure and distribution or habitat use of harbour porpoise inhabiting Rockabill to Dalkey Island SAC are not fully understood. In acknowledging limitations in the understanding of aquatic habitat use by the species within the site, it should be noted that all suitable aquatic habitat is considered relevant to the species range and ecological requirements at the site and is therefore of potential use by harbour porpoises”.

The same document then adds that “gaps remain in the knowledge of the species foraging ecology within Rockabill to Dalkey Island SAC and the available data may be biased toward particular locations due to the nature of survey effort and opportunistic reports from a range of sources. No detailed information is currently available on individual or group movements by harbour porpoise within or into and out of the site, nor is it known whether individuals or groups of the species demonstrate any faithfulness to the site (i.e. site fidelity or residency). Nevertheless, the consistent annual and seasonal occurrence of the species at the site, its occurrence during the calving/breeding period and density/population estimates available to date all indicate the importance of this coastal site for the species”.



There are a number of very important pieces of information contained within these two quotes that are necessary for the assessment of any impacts that a proposed plan or project might have on harbour porpoise:

1. For assessment purposes, *“all suitable aquatic habitat is considered relevant to the species range and ecological requirements at the site and is therefore of potential use by harbour porpoises”*. Therefore, the Burford Bank is as important as any other location within the SAC.
2. There can be no doubt that there is a lack of knowledge regarding the use of the SAC by harbour porpoise.
3. The SAC is considered an important breeding site for harbour porpoise.

NPWS (2013b) contains the appropriate assessment notes, conservation objectives, and targets required to make an informed assessment of the likely impact of a plan or project on the qualifying objectives for the SAC. These are attached for convenience in Appendix 1. For the rocky reef habitat the objective is to maintain favourable conservation condition of reefs in Rockabill to Dalkey Island SAC. Where a project or plan may have an adverse impact on the reef habitat, this can be assessed by using a list of attributes and targets which are clearly defined and quantified. However, the same is not true of the targets used to assess the favourable conservation condition of harbour porpoise.

For harbour porpoise, Target 1 is that the *“species range [of harbour porpoise] within the site should not be restricted by artificial barriers to site use. This target may be considered relevant to proposed activities or operations that will result in the permanent exclusion of harbour porpoise from part of its range within the site, or will permanently prevent access for the species to suitable habitat therein. It does not refer to short-term or temporary restriction of access or range”*.

The use of the terms “permanent” and “short-term” are very ambiguous and open to interpretation. Neither the NIS nor the EIS examine the potential for the proposed

ABR project to constitute a barrier to movement of harbour porpoise through the SAC. This is a very significant short-coming in both documents.

Target 2 is that *“human activities should occur at levels that do not adversely affect the harbour porpoise community at the site. Proposed activities or operations should not introduce man-made energy (e.g. aerial or underwater noise, light or thermal energy) at levels that could result in a significant negative impact on individuals and/or the community of harbour porpoise within the site. This refers to the aquatic habitats used by the species in addition to important natural behaviours during the species annual cycle. This target also relates to proposed activities or operations that may result in the deterioration of key resources (e.g. water quality, feeding, etc) upon which harbour porpoises depend. In the absence of complete knowledge on the species ecological requirements in this site, such considerations should be assessed where appropriate on a case-by-case basis.”*

It must be noted that both targets use the word “should” as the quantifying term. This is very vague. Target 2 is particularly weakly composed. Terminology such as “should”, “could” and “may” (as highlighted) are not sufficient to quantify and assess an impact. It is simply not possible to assess whether human activities (such as dumping at sea) will have a “*significant negative impact*” without a quantifiable metric (as is provided for the rocky reef habitat). The site-specific conservation objective aims do not in this case clearly define the favourable conservation condition for this particular species at the site. It is noted that the NPWS Target 2 relates to negative impacts on individual harbour porpoise as well as the community of harbour porpoise within the site.

The vagueness of the conservation targets must be viewed in terms of the poor data available on the use of the SAC by harbour porpoise. The Habitats Directive requires a precautionary approach to management of Natura 2000 sites, including those in the marine environment. The Court of Justice of the European Union has said that *“where doubt remains as to the absence of adverse effects on the integrity of the site*

*linked to the plan or project being considered, the competent authority will have to refuse the authorisation” (Waddenzee, C-127/02 at para 57).*

Article 6(3) of the Habitats Directive requires that an appropriate assessment must *“contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the work proposed on the protected site concerned”* (Sweetman, C-25/11 at para 44). Therefore, the appropriate assessment must meet these standards before the plan or proposal is authorised. Under Article 6(3), the standard of certainty set by the Court is that the authority (in this case the EPA) must be sure that *“no reasonable scientific doubt remains as to the absence of [adverse effects on site integrity]”* (Waddenzee, C-127/02 at para 59).

It is apparent that the appropriate assessment for the ABR cannot provide the scientific certainty required by Article 6(3) of the Habitats Directive. This is in part due to the lack of information on harbour porpoise within the SAC, and in part due to the inability to quantify impacts against the targets set for the conservation objectives. Without the necessary scientific certainty, the application for a DaS permit must be refused.

## **5. CONDITIONS OF PLANNING PERMISSION**

Whilst the decision of An Bord Pleanála to grant planning permission for the ABR project is outside the control of the Environmental Protection Agency, the inclusion of Conditions 8 through to 12 of the planning permission do not appear to be appropriate under the requirements of both Articles 6(2) and 6(3) of the EU Habitats Directive.

In summary, these conditions are as follows:

- Condition 8 relates to marine mammals and includes a requirement for the developer to monitor marine mammal ecology.
- Condition 9 relates to the monitoring of seals by the developer.

- Condition 10 relates to the monitoring of river lamprey in the River Liffey by the developer.
- Condition 11 relates to the monitoring of winter wetland birds by the developer.
- Condition 12 relates to the monitoring of black guillemot, common tern and arctic tern in Dublin Port by the developer.

These conditions are all included for the reason of *“In the interest of wildlife protection and to broaden scientific knowledge in relation to ecology in Dublin Bay”*.

Under both Articles 6(2) and 6(3), the authority’s obligation is to: **Prevent Damage**, not to **React to Damage**. Under Article 6(2), it must *“avoid [...] deterioration [...] as well as disturbance”*. The inclusion of these conditions to the planning permission for on-going ecological monitoring in the *“interest of wildlife protection”* indicates that An Bord Pleanála did not have sufficient information available to make a confident decision with regards the environmental impacts of the ABR project. Any regulatory response which involves waiting for damage to take place and to be evidenced before prohibitory measures are taken will not comply with the obligations of the Habitats Directive.

It is not permitted to monitor the animals of Dublin Bay whilst work is in progress to find out whether they are adversely impacted or not (i.e. to establish whether the wildlife are being sufficiently protected). This is the function of the EIS and NIS, which must be capable of removing all reasonable scientific doubt as to the effects of the work proposed on the protected site concerned in advance of any work being undertaken. If there was no reasonable scientific doubt as to the impact of the project, then there would be no necessity to monitor the ecology of Dublin Bay. However, if there was any reasonable scientific doubt, then planning permission should not have been granted. Similarly, if there are any doubts regarding the effects of the dumping, then a Dumping at Sea permit should not be granted.

## 6. CONCLUSIONS

It is questionable whether the applicant understands the practical ramifications of the change in status of the “Burford Bank” dump site now that it is within the boundaries of a Special Area of Conservation (SAC). It is now, first and foremost, part of a European network of sites that are to receive protection for nature conservation. This is a European designated site for wildlife conservation under Irish guardianship.

To summarise:

1. The newspaper notice did not include details of the gravel material that the applicant proposes to dump at sea.
2. The newspaper notice did not state that the material to be dumped contains nickel at a level above that considered safe for dumping at sea.
3. The newspaper notice therefore fails to meet the requirements demanded by the Dumping at Sea (Amendment) Act 2004.
4. There is a concern about the efficacy of “gravel capping” and its ability to contain both the dumped material and possible contaminants within the proposed dumping site.
5. Alternative dump sites were not considered.
6. Due to lack of full information on harbour porpoise within the SAC and the inability to quantify impacts against the targets set for the conservation objectives, the necessary scientific certainty required by Article 6(3) of the Habitats Directive for the ABR project to commence has not been met.

Ashley Hayden is pro development and sees the deepening of the Alexandra basin by dredging to enable berthing of large passenger liners as a project worthy of the national interest. That said, those in authority need to follow best practice and in the instance of the Dumping at Sea Permit Application, Ref No: S0024-01 there are oversights listed above which need to be addressed. On that basis the planning permission for “Dumping at Sea Permit Application, Ref No: S0024-01” should be refused and an alternative site outside the Rockabill/Dalkey Island SAC chosen.

Ashley Hayden

Carrig,

Ballythomas,

Gorey,

Co. Wexford.

Web: [www.anirishanglersworld.com](http://www.anirishanglersworld.com)

Date: 27/08/2015

*For inspection purposes only.  
Consent of copyright owner required for any other use.*