

To whom it may concern,

RE: Islandmagee Gas Storage TC 041/20 & AIL/2012/0033

The Divers Action Group Northern Ireland (DAGNI) is formed of recreational scuba divers and snorkellers who share a common interest in exploring and protecting local marine biodiversity. As a group of volunteers, we put our heads together in order to respond to activities that affect our local marine environment. DAGNI is a group of individuals, it is not affiliated with, or funded by, any organisation or political party.

DAGNI welcomes the opportunity to respond to this public consultation and to raise concerns relating to the consultation process, the environmental impact assessment upon which the project is based and the overall impacts of the proposed discharge.

Consultation Process

Criterion 2, ‘Duration of consultation exercises’, in the ‘HM Government Code of Practice on Consultation’ states that “*Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible*”. The Islandmagee Gas Storage Project Consultation opened on 16th December 2020 and closes on 20th January 2021 (extended from original date of 13th January), thereby covering a period of five weeks, which coincided with the Christmas and New Year holidays, the UK exit from the European Union and the ongoing COVID-19 pandemic, as well as multiple other marine-related consultations released by the Department. This fails to meet C2 of the HM Government Code of Practice and **an extended period of time should have been allocated for stakeholders, and the wider public, to review the documentation provided and formulate a response.**

The ‘HM Government Code of Practice on Consultation’ also states in C2 that “*the consultation document should be clear as to the reasons for the shortened consultation period and ministerial clearance (or equivalent, e.g. in non-Ministerial departments) for the shorter timeframe should be sought. In such circumstances it is important to consider the provision of additional means through which people can express their view*”. This fails to meet C2 of the HM Government Code of Practice as **no such explanation is provided in the consultation documentation to explain the short, 5-week consultation period, nor is any detail of additional means for the public to express their view given.**

Finally, C2 of the ‘HM Government Code of Practice on Consultation’ states that “*when planning a consultation, it is important to take steps to raise awareness of the exercise among those who are likely to be interested. In particular, departments should consider ways to publicise consultations at the time of, or if possible before, the launch-date so that consultees can take advantage of the full consultation period to prepare considered responses*”. This fails to meet C2 of the HM Government Code of Practice as **we are not**

aware of any attempts by the Department to publicise this consultation adequately. This also fails to meet Criterion 4 ‘Accessibility of consultation exercises’, in the ‘HM Government Code of Practice on Consultation’, which states that “*it is essential that interested parties are identified early in the process so that consultation exercises can be designed and targeted accordingly. When consultation exercises need to reach a diverse audience, several approaches may be required. In the consultation document it should be stated what ways are available for people to participate, how exactly to get involved, and why any supplementary channels have been chosen. Over-reliance on standard lists of consultees to disseminate consultation papers can mean that key groups are excluded and others receive consultation documents that are not relevant to them*”. Users of the project area for marine recreation e.g. diving, snorkelling, swimming, angling and paddle boarding, have not been identified as interested parties and ‘several approaches’ were not adopted to reach this wider audience.

Environmental Impact Assessment

The 2019 Benthic Survey Report fails to provide an adequate assessment of the environmental impacts from seawater abstraction and impoundment, and brine discharge, as described. DAGNI’s concerns in this regard are listed below:

Quality

Section 7 (Biodiversity) of The Marine Environmental Conditions Update document is littered with spelling errors, particularly relating to the species scientific names e.g. ‘*Laminaria hyperborean*’ and ‘*Nemertisia*’. Furthermore, many species are referred to as ‘*Genus sp.*’, when only one species within the genus occurs within the Northern Ireland Marine Area e.g. *Colus* sp. Finally, *Philine aperta* is listed in the trawl sample species lists, however this species name is a mistake for *Philine quadripartita*. *Philine aperta* is a native to South Africa and was previously wrongly assigned to *P. quadripartita* records. This suggests a rushed approach to this vital aspect of the Environmental Impact Assessment.

Risk assessment

Little/no reference is made to the level of risk associated with leakage of brine from natural cracking and basalt intrusions within the gas caverns, which has been observed in underground salt mines locally (Anon, January 2021). Natural leakage has been described from many underground gas storage sites (Keeley, 2008) and therefore an estimate of expected levels of leakage into the surrounding marine environment, and the possible impacts of this is required, alongside proposed mitigation measures.

Use of biodiversity data

The planning authority has a statutory duty under The Wildlife and Natural Environment Act (Northern Ireland) 2011 (the WANE Act) to have regard to conserving biodiversity as part of policy or decision making and in drawing up development plans. Further guidance is available in The Biodiversity Duty guide for public bodies, which includes the need to confirm the presence of species via a data search, for example through the Centre for Environmental Data and Recording (CEDaR). Species and habitat data from CEDaR is provided in document ‘16. App G – Biodiversity CEDaR 2019’, however this is only included

as a raw data file in the Appendices and none of the data has been included, or referenced in either the Shadow Habitat Regulations Assessment or Marine Environmental Conditions Update reports.

Under Section 3 of the Wildlife and Natural Environment Act (Northern Ireland) 2011, the Department of Environment (Northern Ireland) must designate and publish a list of animal and plant species, and of habitats, which are considered to be of particular conservation attention in Northern Ireland. The current priority species list is provided [here](#) and is compiled of species either listed as a UK Priority Species or considered to be rare, declining or for which Northern Ireland is considered a stronghold. **43** marine species listed as Northern Ireland Priority Species are included within the data provided by CEDaR (Table 1), and 11 of these species are recorded within 100 metres of the brine discharge point (Map 1). However, of these, only *Ammodytes* sp., some shellfish and bird species are mentioned in the Marine Environmental Conditions Update or Benthic Survey reports.

Acknowledgement of these priority species records and a review of the potential impact on these species should be included in any Environmental Impact Assessment.

Table 1 | Northern Ireland Priority Species included in data provided by CEDaR in July 2019 recorded from within the outfall boundary area reviewed by RPS.

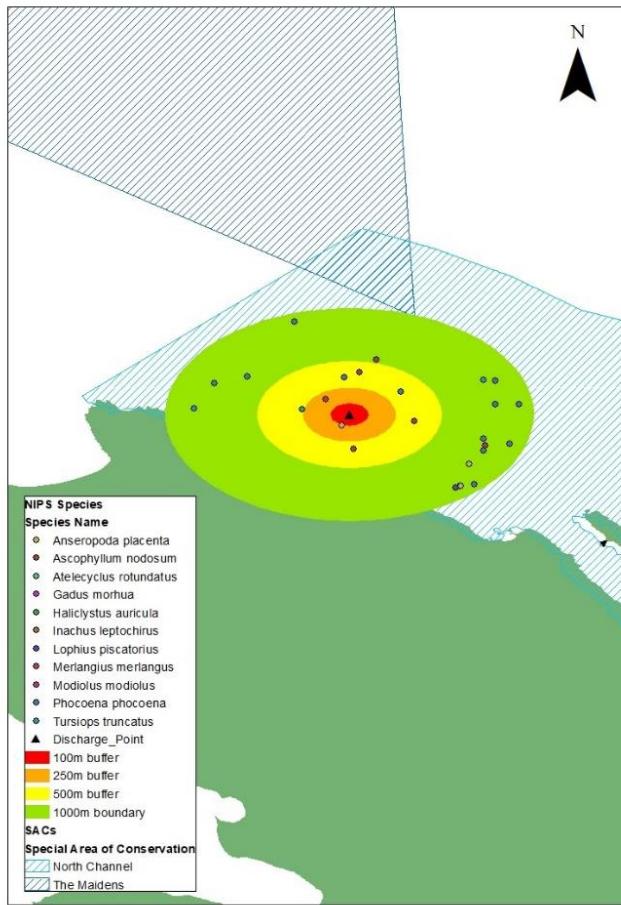
Species Group (UK Species Inventory)	Scientific Name	Common name
Alga	<i>Ascophyllum nodosum</i> <i>Desmarestia dudresnayi</i> <i>Phymatolithon calcareum</i>	Egg wrack A brown seaweed Common maerl
Bird	<i>Branta bernicla</i> <i>Larus ridibundus</i> <i>Numenius arquata</i> <i>Tringa totanus</i>	Brent goose Black-headed Gull Curlew Redshank
Bony fish (Actinopterygii)	<i>Ammodytes marinus</i>	Sandeel
Bryozoan	<i>Pentapora foliacea</i>	Ross coral
Marine mammal	<i>Orcinus orca</i>	Killer whale
Cartilaginous fish (Chondrichthyes)	<i>Cetorhinus maximus</i>	Basking shark
Coelenterate (=cnidarian)	<i>Polyplumaria flabellata</i> <i>Diphasia alata</i> <i>Diphasia nigra</i> <i>Haliclystus auricula</i> <i>Lytocarpia myriophyllum</i> <i>Virgularia mirabilis</i>	Hydroid Hydroid Hydroid Kaleidoscope Jellyfish Hydroid Slender sea pen
Crustacean	<i>Atelecyclus rotundatus</i> <i>Cestopagurus timidus</i> <i>Inachus leptochirus</i> <i>Munida rugosa</i>	Circular crab Hermit crab Spider crab Rugose squat lobster
Echinoderm	<i>Anseropoda placenta</i> <i>Labidoplax media</i> <i>Leptosynapta bergensis</i> <i>Solaster endeca</i>	Goose foot starfish Sea cucumber Sea cucumber Purple sun star

Mollusc	<i>Cerastoderma glaucum</i> <i>Mimachlamys varia</i> <i>Modiolus modiolus</i> <i>Palio dubia</i> <i>Tonicella marmorea</i>	Lagoon cockle Variegated Scallop Horse mussel Nudibranch Chiton
Reptile	<i>Dermochelys coriacea</i>	Leatherback turtle
Sponge (Porifera)	<i>Clathria (Clathria) barleei</i> <i>Clathria (Microciona) elliptichela</i> <i>Hymedesmia (Hymedesmia) cohesibacilla</i> <i>Hymedesmia (Hymedesmia) rathlinia</i> <i>Hymedesmia (Hymedesmia) stellifera</i> <i>Hymerhabdia typica</i> <i>Lissodendoryx (Ectyodoryx) jenjonesae</i> <i>Mycale (Aegogropila) contarenii</i> <i>Spanioplton armaturum</i> <i>Tethya hibernica</i>	Sponge Sponge Sponge Sponge Sponge Sponge Sponge Sponge Sponge Sponge
Tunicate (Urochordata)	<i>Pycnoclavella stolonialis</i> <i>Pyura microcosmus</i>	Pin-head sea squirt Sea squirt

Limaria sp. and *Limaria loscombi* are both listed in the Benthic Survey Report. *Limaria* sp. was recorded three times, in a trawl samples 5, 7 and 10, yet was not identified to species level. This may have been the file shell *Limaria hians*, which forms biogenic reefs that are highly protected (Hall-Spencer & Moore, 2000)

No investigation of the unique sponge communities (including priority species listed in Table 1) (Picton & Goodwin, 2011) or other special habitats found in the North Channel has been carried out. This may be put down to ‘Trawls in shallower water i.e. landward of the outfall point were avoided because of potential hard ground that could have damaged the gear’, however other methodology, such as ground-truthing by divers, could have been used to adequately survey this area of seabed.

The two dominant habitats described in the 2019 Benthic Survey Report are: ‘*Flustra foliacea* and *Hydrallmania falcata* on tide-swept circalittoral mixed sediment’ (SS.SMx.CMx) and ‘*Ophiothrix fragilis* and/or *Ophiocomina nigra* brittlestar beds on sublittoral mixed sediment’ (SS.SMx.CMx.OphMx) are both listed as Northern Ireland Priority Habitats. Once again, this is not acknowledged in either the Benthic Survey or Environmental Conditions Update reports. Brittlestar beds are considered to be of Medium Sensitivity to an increase in salinity resulting from brine discharge (De-Bastos, E.S.R., Hill, J., & Garrard, S. L. 2020), while no evidence is currently available on the effects of increased salinity on *Flustra foliacea* and *Hydrallmania falcata* on tide-swept circalittoral mixed sediment (Readman, 2016). Due to the importance of these habitat types, in both cases and until quality evidence is available, a precautionary approach should be applied. Furthermore, the biotope ‘Sediment-affected or disturbed kelp and seaweed communities’ (IR.HIR.KSed) is listed within close proximity to the discharge zone. Kelp is a Blue Carbon Habitat, which plays an important role in carbon storage and sequestration. Protecting Blue Carbon Habitat forms is a key government objective for tackling climate change (see [Poots launches £800,000 environment funding boost](#)).



Map 1 | Northern Ireland Priority Species included in data provided by CEDaR in July 2019 recorded from within 100 metres, 250 metres, 500 metres and 1000 metres of the brine discharge point.

Biodiversity

Fish

The design for the abstraction of seawater is a 12mm grid screen for screening, however the latest best practise recommended by [UNESCO \(2017\)](#) is a 1mm grid screen. Previous studies on seawater abstraction from nearby Ballylumford Power Station, have reported a high abundance of the sand eel *Ammodytes* sp., captured in the screen (Moorehead & Service, 1992). Sand eels are listed as a Northern Ireland Priority Species due to their role as both predator and prey species, providing a link between the lower and upper levels of the marine food web in the Irish Sea. In this way, sand eels also support other protected species, such as the harbour porpoise. Maintaining the supporting habitats and prey for the harbour porpoise is a conservation objective for the North Channel SAC, and harbour porpoise are commonly sighted around Islandmagee (see data provided by CEDaR). As sand eels tend to gather in large shoals and burrow into the sand they are at high risk of being impacted by sea water abstraction. **The documents lack any description of mitigation measures for capture of these priority fish species as part of the seawater abstraction process.**

Birds

The first part of the breeding season was omitted from the ornithological survey and there is no mention of the potential impacts of either construction or possible ingestion of high-

salinity brine on bird behaviours or health. The gas storage facility is proposed to be developed underneath Larne Lough, part of which is a designated protected area under the EU Birds Directives (Special Protection Area, or SPA). Only 3 colonies of breeding Roseate terns remain in the UK & Ireland but a single breeding pair are known to use Blue Circle Island annually, which the RSPB prepare in the spring. This pair returned again in 2020 and breeding was successful with one chick fledging in the summer. **This pair is clearly faithful to a nest site and so is highly likely to be disturbed by construction.**

Marine mammals

The Environmental Impact Assessment does not review the potential long-term impacts of the years of construction on marine mammal species' behaviour, particularly those who feed nearby (e.g. harbour porpoise *Phocoena phocoena*). Construction will undoubtedly cause a disturbance that may scare off species who regularly frequent the area, long after construction is completed. The study area falls within the North Channel SAC of which harbour porpoise is the key designation feature. The conservation objectives [here](#) state that there should be "no significant disturbance of the species" and stipulates "condition of supporting habitats and processes, and the availability of prey is maintained." The construction of the seawater intake and brine outfall will be undertaken over an estimated 6-month period, involving tunnelling, excavation and drilling. This will create underwater and subsea noise pollution which may impact marine life and specifically, cetaceans which are highly sensitive to anthropogenic noise.

Benthic species

The Environmental Impact Assessment does not explain the impacts of drilling on benthic species, particularly burrowing species such as molluscs and polychaetes. While the drilling may not damage their immediate habitat, vibrations and noise pollution from the drilling could potentially impact these species (Currie & Isaacs, 2005). Furthermore, no description of the impacts of the release of chemical components from the salt bed are provided.

Maerl beds, a UK BAP Priority Habitat are also present in the project area. Maerl beds are also listed as an OSPAR Threatened and Declining habitat, which should be protected and safeguarded, as per Section 3 of the Wildlife and Natural Environment Act (Northern Ireland) 2011.

Cumulative impacts

In regards to the impacts for marine biodiversity within and surrounding the project area, the cumulative impacts of noise pollution, habitat removal, prey removal and increased salinity need to be considered, particularly in the context of the nearby North Channel and Maidens SACs, and the respective designated features. In all cases, mitigation measures should be in place and described in the consultation documents and a precautionary approach must be adopted.

Marine recreation

This is a popular area for marine recreation, particularly for sea swimmers, anglers, paddle boarders, snorkellers and divers. 4 well known dive sites are found in close proximity to the

intake and discharge points: [Skernaghan Point](#), [Dundressan](#) and the wrecks of the [S.S. Peridot](#), and the [Ailsa](#). The S.S. Peridot is an important part of local history, with its anchor on display in Larne Museum and Arts Centre. Both S.S. Peridot and Skernaghan Point are close to the shore and sheltered and so are important locations for trainee divers and as poor weather options. The [Marine Plan for Northern Ireland \(2018\)](#) sets out key objectives which include “*to promote the marine resource, its recreational value and its wider economic, environmental and social benefits to all*” and “*to promote the preservation and enjoyment of marine related heritage assets*”. Reference to local marine recreation and the possible impacts from this project, are missing from the consultation documents, despite being included as key objectives of the Marine Plan. A ‘lack-of water based activities provided by private activity providers’ is mentioned in the Mid and East Antrim Borough Council [Outdoor Recreation Strategy and 10 Year Action Plan](#) and therefore the natural marine features along this stretch of coastline play a vital role in promoting marine recreation, a key objective of the Marine Plan and important for health and well-being in the area as well as for attracting visitors.

Summary

The Divers Action Group Northern Ireland is passionate about exploring the rich marine biodiversity around our coastline and protecting it for today and future generations to enjoy.

DAGNI believes that all future policy and planning decisions should be taken within the context of the climate emergency that we face and the threat this has on our seas.

Based on the information in the consultation documentation provided, the need to protect the local marine environment outweighs the need for this project and instead attention (and budget) should be focussed on moving towards low Carbon heat sources for homes in Northern Ireland.

Yours sincerely,

Members of the Divers Action Group Northern Ireland

Divers Action Group Northern Ireland

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