

Preesall Gas Storage and Brine Discharge December 2017

Officers have been fielding a number of angry enquiries by email, phone call and personal visit, from concerned fishers and others about what they perceive to be the sudden announcement that construction of a pipeline to discharge high volumes of brine into the sea off Rossall on the Fylde peninsula is imminent, with brine discharge to start in late summer 2018. There is great anguish over the lack of engagement and consultation with fishing associations and individual fishers. A number of public meetings are believed to be being held, with a ground-swell of opposition and fury.

The Senior Scientist has contacted Halite, the MMO and the Environment Agency in an effort to find the appropriate people to whom these enquiries should be directed. To date no such contacts have been received.

This issue will be of interest and concern to local authorities, environmental and fisher stakeholders alike and is likely to gain media interest. It is understood that local MPs are being contacted and the issue may well become quite substantial.

The purpose of this tabled report is to inform Members of the background and current situation as far as Officers' knowledge extends. It can be seen that process has been followed and permissions are in place for the development to go ahead.

Background:

As has been reported over the years, there have been three planning applications for the storage of gas in salt caverns in the Preesall area, on the east side of the Wyre Estuary near Knott End, since the early 2000s. Different companies have submitted applications, all of which went to the Planning Inspectorate who refused them. They have all involved the discharge of brine from the salt caverns into the shallow waters off the Fleetwood coast.

Around 2010 a company called Halite took over from previous companies – it is understood some of the directorship from Canataxx, the most recent predecessor, formed the new company. Ms Knott was employed around the same time with NWIFCA and submitted responses on behalf of the Authority expressing extreme concern over the brine discharge element. This had been consented by the Environment Agency in 2007 who used plume dispersal modelling on which to base their decision. The modelling was reviewed in 2010/11 due to the time lapse since the consent was issued and changes to the coastline, especially post sea defence construction at Cleveleys. The diffuser is to be positioned 2.3km offshore from Rossall. The EA discharge consent had the following specified standards:

- “the plume concentration should not exceed 40 parts per thousand (PPT) salinity at 50m from the discharge;
- the salinity should not exceed 10% over ambient at 500m from the discharge;
- the plume should not impact upon the local shoreline or upon Morecambe Bay”.

The modelling predicted:

- “the plume concentration of 40PPT would be achieved at 50m from the discharge with the possible exception of 1-2 hours at low water slack on spring tides where it would reach 40PPT at 60m. The probability of maximum discharge load is considered very low as the washing process is unlikely to produce the theoretical peak concentration and the washing process could be managed to avoid this situation;
- a salinity of above 10‰ of ambient salinity can be achieved within 250m of discharge;
- the impacts upon the shoreline and Morecambe Bay are negligible and with normal (natural) spatial and temporal variations within the area”.

“Following cessation of discharge water would be expected to return to normal within a short period of time”.

Should this modelling prove accurate there should be no impact on protected sites like Morecambe Bay, Liverpool Bay, Shell Flat and Lune Deep. The diffuser sits just outside the boundaries of all of them. There would be a ‘dead zone’ for 50m radius around the diffuser head.

Ms Knott was involved in various meetings and tele-conferences with Halite, their consultants, Natural England and the Environment Agency. The greatest concern was that if the application was approved that the actual plume obeyed the modelling predictions, and if not that operations were immediately ceased. An agreement was made to set up a ‘Marine Monitoring Group’ should the application be approved consisting of EA, MMO, Natural England and NWIFCA, to ensure robust and on-site monitoring from the point of switch on of operations to ensure action is taken immediately should the brine behave differently to the modelling. This was lodged with the EA Discharge Consent.

The 2010 planning application went through a lengthy process and to the Planning Inspectorate, meetings of which Ms Knott attended on behalf of the NWIFCA. 40,000 objections were lodged and in 2012 the Planning Inspector recommended refusal of the application on the basis that the geological surveys were not detailed enough. The then Secretary of State refused the application.

Halite appealed the decision and on 17 January 2014, the High Court of Justice quashed the decision of the Secretary of State to refuse the Application. The then Secretary of State was required to redetermine the Application following the judgment of the High Court, and asked for further geological information which was provided by an independent expert. Other aspects of the project were also re-considered. Following this the SoS considered it was worthy of approval and overturned the previous decision. The Development Consent Order (DCO) was granted in 2015. In relation to the brine discharge the Secretary of State’s decision letter of July 2015 states:

“In respect of the brine discharge into the Irish Sea, the Secretary of State notes the Examining Authority’s findings in section 6 of the ER and other representations received under the 2010 Rules on this matter. The Secretary of State agrees that the requirements in the deemed marine licence within the Order will ensure monitoring of the receiving waters around the discharge and confirm conditions and any environmental impacts. The Secretary of State agrees with the Examining Authority’s findings and is satisfied that this impact will be regulated by the Marine Management Organisation and the EA”. (SoS decision letter. July 2015).

The Science Team were aware of the redetermination and were keeping a watching brief on any movement to act when necessary and to report back to Members.

Current Situation:

Following the granting of the DCO things went quiet until autumn 2016 when Ms Knott was contacted by Halite and their consultants and a meeting was arranged, as reported to Members earlier this year. The meeting agreed that NWIFCA would be kept fully up to date with progress, specifically in order to ensure full engagement with the Authority and fishing stakeholders. Shamefully this has not been the case, despite further requests for updates from the Senior Scientist to Halite.

The first that Officers knew that progress had been made was a request from a consultancy for NWIFCA dispensation to carry out benthic surveys. It then transpired that both NWIFCA and Natural England had been omitted from consultation on the Baseline Benthic Monitoring Methodology, since when there have been a number of tele-conferences where both NE colleagues and the Senior Scientist have expressed disquiet about the methodology and the timing of baseline data collection in November, and the fact that both agencies were omitted from the consultation. It appeared that the agreement for the Marine Monitoring Group had also been lost. Naturally strenuous effort has been made to ensure this has been re-instated, although it has worryingly yet to be formed.

The timeline as understood is that infrastructure construction is commencing in 2018, with pipeline construction occurring during summer and first brine discharge to occur in October 2018. First gas storage is due in 2020.

Halite have been contacted again with a request for up-to-date information and it has been made very clear that their lack of engagement with the NWIFCA, fishing associations and individuals is disgraceful. Information on current proposals has been obtained from the internet:

- Up to 19 new purpose built caverns • 100m diameter • 50m to 200m tall • At least 300m below the ground surface • Shaped for stability
- Gas is stored in salt deposits because of its unique properties which prevent gas migrating
- Seismic forces, whether from fracking or natural seismic events, will not affect the cavern stability.

The building of the brine discharge pipeline is licensed through Marine Licensing by the MMO (Marine Management Organisation). Apparently the plume modelling has been reviewed by the EA, but officers have not had sight of the report or any changes which might affect the EA Discharge Consent.

Halite's website states that the Discharge Consent contains specifics on:

- Exceedance limits on discharge volume, rate, salinity, suspended solids, pH, tributyl tin, total cadmium and temperature;
- Should discharge cause salinity, tributyl tin and copper levels in the receiving waters to exceed the limits stated, the discharge will cease (and will not re-commence without the prior written agreement of the Environment Agency)

There is also an Environment Agency Abstraction Licence which:

- Permits the abstraction of water from Fleetwood Fish Dock for the purposes of solution mining
- Limits on maximum quantity of water to be abstracted
- Measuring and reporting requirements

- Additional conditions (e.g. installation of a 1-2mm fish screen to prevent the
- entrapment, entrainment or impingement of fish and eels at the point of abstraction).

The Senior Scientist will continue to endeavour to ensure the Marine Monitoring Group is set up and fully functioning as early as possible and that NWIFCA play a vital role in the monitoring of the brine discharge and impacts on the marine environment.

Mandy Knott

Senior Scientist

NWIFCA

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