# ISH7 Pt1

0:01

Good morning, everybody. It's now 10:00 and it's time for this hearing to begin. So I'd just like to welcome you all to this issue specific hearing for the application made by Associated Associated British Ports for an order granting development consent for Immingham Green Energy Terminal.

0:18

Just before I carry on with some introductory matters, can I just confirm that the live stream and the recording of the event has commenced?

0:25

I can confirm that the live stream and recording has commenced. Thank you very much for that. My name is Adrian Hunter, and I've been appointed by the Secretary of State to be the lead member of the panel to examine this application.

0:37

Before I run through some housekeeping and preliminary matters, I'm just gonna ask the members of the panel I think just introduce themselves, please.

0:45

Good morning, everyone. I'm Karen Taylor, and I have also been appointed by the Secretary of State as a member of this examining authority.

0:56

Good morning. My name is Catherine Metcalf, and I've also been appointed by the Secretary of State as a member of this examining authority.

1:05

Good morning. My name is Lynn Page and I've also been appointed by the Secretary of State as a member of this examining authority.

1:12

Good morning. My name is Mutai Sheikh and I have also been appointed by the Secretary of State as a member of this examining authority.

1:19

Thank you all. So together we constitute the examining authority for this application and just want to deal with a few housekeeping matters with those attending in the room. If I can and if I could just ask ask you to turn on mobiles and devices to silent and there is no fire drill proposed today. But if one does go off, we exit through the the fire doors and the congregating point is is on the lawn outside

1:41

and that just like to ask those present while I just run through some some matters that you may well have heard before. But I just need to sort of go through these preliminary matters for people who may not have been there at hearings previously. The meeting will follow the agenda that was published on

the National Infrastructure website on the 2nd of April and the library reference number for that is Evie 10001 and you will probably be happy if you do have a copy of this in front of you.

### 2:04

This agenda is for guidance only and we may well add other considerations or issues as we progress. We will. We will conclude the hearing as soon as all relevant contributions have been made and all questions asked and responded to. But if the if the discussions can't be concluded then it may be necessary for us to prioritise matters and defer other matters to further written questions. Likewise, if you cannot answer the questions being asked or require additional time to get the information requested, please indicate that you're responding. Writing.

## 2:32

It's our intention to take a number of breaks throughout the day. We'll probably aim for a mid morning break about 11:30 and aim to break for lunch about 1:00 PM and we will have an afternoon break if required.

### 2:42

My final point on the agenda just relates to post hearing action. Note should they arise during the hearing will be noting these as we go along and prior to the close of the meeting. We do intend to go through these and list the entire list of hearing actions for everybody but these will also be issued in writing as soon as practical after the close of the hearing as well. Today's hearing is being undertaken in a hybrid way meaning some of you are present in the hearing venue while some of you are joining us online and using virtual using Microsoft Teams and people watching the live stream as well. If I could just remind you, when we do have a break in

## 3:14

proceedings and we do need to stop the live stream. So when we recommend you will need to recommence the your browser just to restart the live stream.

## 3:23

And also finally, just for the purpose of identification on the recording and ease of reference, when you do speak at which point could I just ask you to introduce yourself and who you represent as well?

## 3:33

Does anybody have any questions just on that sort of process that I've just just outlined in terms of how we're looking to to run today's hearing?

### 3:41

No. OK, thank you. And just want to say just a few words finally about data protection, if I can just like to make you aware that the, the event is being both live streamed and recorded. The digital recordings that we that we make are retained and published and they will form part of the public record and can contain your personal information to which the General Data Protection Regulations do apply. The planning inspectors practise is to retain and publish recordings for a period of five years from the Secretary of State's decision on the development consent order. Consequently, if you participate in today's issue specific hearing,

### 4:13

it is important that you understand that you recorded and that you therefore consent to the retention and publication of the digital recording.

It's unlikely we'll ask you to put sensitive personal information into the public domain, and like I said before previously, we encourage you not to do so. However, if for some reason you feel that it is necessary for you to refer to sensitive information, we'd encourage you to speak to the case team in the first instance and we would then explore whether the information could be submitted in writing and redacted suitably before it's published.

### 4:41

Does anybody have any questions or comments on on the GDPR procedure? No. Excellent, thank you. And just finally, what I'd like to do is just explain the purpose of today's issue specific hearing and it's being held to explore a number of matters orally in relation to marine side issues. Principally

## 4:57

our purpose to is to examine the information submitted by the applicant and also interested parties. And as a result, I'd like to reassure you that we are familiar with the documents that have already been submitted. So when answering questions, you do not need to repeat in length something that has already been submitted, but if you could refer to the appropriate Pins library reference number when you do, that would be enormously helpful to us.

### 5:18

Just before I move on to introductions, just have anybody have any sort of final comments just on those introductory matters that I've, I've just gone through?

## 5:25

No. Excellent. Thank you very much. So if I sort of move on to to introductions and if you could just sort of stay and who you are, what, what organisation you're representing, if you've got anybody with you that would be enormously helpful to us. So if I could start with the applicants, please. Good morning, Sir. My name is Hereward Phillpot Kings Council. I'm instructed jointly by Bryan Cave, Leighton Paisner on behalf of the applicant Associated British Ports and Charles Russell. Speechly is on behalf of their products and I anticipate calling for additional speakers

## 5:57

during the course of the hearing, all of whom spoke during the first week of hearings. And their credentials are therefore included in Rep 1045. And I'll just remind you who they are. They're all sat to my right. So Mr Paul Bristow, the head of Marine, had Associated British Ports and to his right, Mr Adam Varley, Project Development Manager, Associated British Ports. To his right, Mr Tymon Robson, Project Director of Air Products and then finally to his right Mr. John Beattie, who's the director

## 6:30

and Principal Risk Analyst at Nanotech,

# 6:37

thank you very much yourself. Well, thank you.

### 6:40

If I could now move on to other organisations and start with N NE Lincolnshire, please. Morning, Sir. Yes, it's Martin Dixon and I head up the planning team at NE Lincolnshire Council.

Good morning, Mr Dixon. Thank you very much. And then if I could move on to the harbour Master, please. Good morning, Sir. Good morning, panel. My name is Victoria Hutton of council. It's Miss Hutton. I'm instructed by Missus Jane Wycombe of Winkworth Sherwood on behalf of the Harbour Master Humber, who is Captain Furman.

7:13

You have in our written representation, which is Rep 1100, some detail in terms of his credentials and that's paragraphs 3.3 to 3.5.

7:29

Good morning. Thank you very much. And can I just clarify, I think you are hanging around for item number three, but then you may be leaving us at that point, is that correct? So yes, if, if that's if you're content with that, yeah, that's fine. The only reason I ask is that one of the items we sort of mentioned before under any other business was just protective provisions, which isn't on the agenda and #3. So we will probably cover it at the end of #3, if that's all right. It's just very simple question to sort of find out an update really which we sort of carried over from previous discussions to await for you being in the room. I'm very grateful for that. Thank you very much. Thanks

8:00

and and I think that's it. I don't think anybody else is joining us online. We were expecting the oil terminal and CLDN ports but overnight they've sent in emails to apologise that they won't be attending today. So, so they're not in attendance which may well curtail some of the discussion we can have on on #3, but we'll we'll progress as as much as we can. And

8:22

just before I move on to #3, is anybody else in the room who I have not mentioned who does wish to speak today

8:27

or online?

8:29

No. OK, that's great. Thank you.

8:34

Well, I think that concludes sort of items one and two on the agenda in terms of sort of the, the procedure and just sort of a general sort of overview and and welcome from us. So what I'd like to do now sort of move on to item number 3, which is navigation and operational safety.

8:49

And and the starting point for this I think is just some questions that I have for the applicant in particular around the proposed 5 knot speed limit and the the 150 metre exclusion zone and that does does mitigation measures

9:03

and and like we said I've seen and we've seen the comments that we've received from CLDN and and

IT in sort of submissions at DL1 and DL2 and we've also seen the responses that the applicant has made at the DL2 to those. So

### 9:18

we've got that. So there's no real need to sort of go over that. But the questions that I have I think sort of stem from from that information that there's already been submitted

#### 9.25

and and really around those sort of two proposed mitigation measures. It would be helpful for us to understand and principally sort of when will those mitigation measures be required, IE is it sort of when a ship is berthed or are they in there all the time and where would the five knots speed limit commence from? And and sort of where is the 150 metre exclusion zone measured from? Is that from the actual sort of birth and outwards or is it sort of a concentric circle centred on the the birthing points and and would they sort of and how do they relate and sort of interact with any restrictions that exist

### 9:59

to the oral terminal itself as well?

### 10:03

Sir Harry would Philpott on behalf of the applicants. So before I turn to those to my right, I just wonder, given that in in respect of each of those matters there matters regulated by the Harbour Master Humber, whether you want to hear from us first or whether you want to hear from the person who would be responsible for

### 10:24

yeah, in enforcing those enforcing those matters and their understanding of it. We can deal with it either way. But I raise that because it may be better to hear it from the horses mouth first see my notes, which is they were, because my first question was to you, to then ask the harbour Master Sir to respond to that,

### 10:41

to avoid me sort of messing up my notes. If you could go with yourselves first, and that would be easier for myself, I think

### 10:48

so in in that case, I'm going to ask Mr BT to deal with the that those, those matters. And insofar as there's anything else that you need any of my other speakers to answer, we can tackle that after he's spoken.

## 11:07

Yeah. Good morning, everyone. John Beattie for the applicant. So I think as Harry was saying, probably defer to the harbour matter, Humber, in terms of the exact timing of these measures, when they would apply. But we carried out the navigational risk assessment for the project as part of the consenting work. So they identified a range of mitigation measures covering both construction and operational phases. And some would be unique to each phase and some would overlap both phases. And in fact a number of measures mitigations are already in existence and the number

such as the vessel traffic Service which I think you visited yesterday in terms specifically of the speed limit and the exclusion zone and first of all I'd point out they would be the same as those mitigations applied at the neighbouring Immingham Oil Terminal. So I get birth has been aligned with that terminal which is very helpful from a navigational safety point of view. And and I imagine so in terms of speed and exclusion zone really I would say that as commencing from the operation of the jetty

### 12:10

itself, you know following construction, there may be some other safety area demarcated during the construction work that might change. But really the the 150 metre exclusions when we're talking about would be from operation

### 12:25

now in terms of that exclusion zone. As I mentioned the next door IT facility there is a standing notice to Mariners in place

### 12:34

a #34 on passing the Immingham jetties dated 16th of August 2011. So that states that matters. And pilots of vessels which have to pass the Immingham oil terminal jetties must not approach nearer than 150 metres from the face of the berths.

#### 12:52

So really the same 150 metre distance as planned for I get measured from the face of the birth or the birth line. I think that's a similar terminology. So really that would be in place

## 13:04

constantly, you know that would be in place 24/7. Doesn't matter whether there's any vessel on the birth or not. That just applies as soon as the birth is operational

### 13:15

and and that difference I would say from the speed limit. So there again there's this. The aforementioned standing notice to Mariners references the Humber Navigation bylaws from 1990, clause 14 three which states that the matter of a vessel shall ensure that the vessel does not exceed a speed of five knots when approaching and passing energy jetty. When any vessel is mooring, moored or unmooring at the jetty. So slightly different there. So this wouldn't apply

### 13:46

constantly, you know, 24/7. It would only apply the speed restriction when there's a vessel you know operating at the berth

### 13:56

so and so by by having an identical speed limit for IGIT same As for IoT it just means it's well understood by passing Mariners. You know for example pilots and pilot exemption certificate holders they're already familiar with these restrictions applying it mixed door ending them oil terminal And so that would be helpful in terms of if they apply simultaneously highlight and I get the speed limit is the same. So you know they're not having to speed up and slow down twice to meet

different speed limits and that applies to both. So before I ask Mr Beater to carry on Harry would fill put on behalf of the applicant just one legal point of clarification in terms of the speed limit. So although it's right to say that it is reflected in a notice to Mariners it's already enshrined also in the Humber navigation bylaws 1990. You may have seen this in the written material as Bylaw 14 three,

#### 14:59

so it's in both places, but it applies automatically because it applies to all jetties where those operations aren't taking place. So products for interrupting, but I thought you might find it helpful to have that now. I'll pass back to Mr Beatty.

#### 15:15

I mean I think that more or less completes what I wanted to see in terms of when the measures would be required and measured from. I think the question does go on to ask about interaction with any other existing navigational restrictions and but really

## 15:31

the way we see it is because they are aligned with what's already in place you know there shouldn't really be any

#### 15:38

and negative interaction you're they are designed to be complementary so

## 15:44

so yeah and when we had the the workshop as part of the navigation risk assessment we had a workshop involving port personnel including the Humber Harbour master and port users for example CLDN Immingham oil terminal attended. So these measures were discussed at that forum and generally they were agreed and seen as seen as relevant appropriate to mitigate the safety hazards for I get and there was no dissenting voices at that time on either at the meeting or the report that followed.

## 16:22

Thank you. I think I think that's that's helpful to supervise that that context for for us that that's useful. Thank you. If I could turn to the harbour Master now and sort of see if there's anything that you wish to add or whether you can sort of confirm your understanding and and also sort of how how you would sort of be responsible for sort of enforcing those sort of speed limits and the and exclusion zone as well. Thank you Sir Victoria Hudson for the harbour Master Humber. So would it be helpful for me to

### 16:48

provide some sort of legal context to this, which I think when we come on to a number of the questions would help in terms of what should be in the DCA, what shouldn't enforcement, et cetera, Yes, I think he probably would actually. Yes. Thank you.

### 17:01

So, so the way the way the Harbour Master sees it, that it is important for us to separate in our minds two particular functions of the Conservancy and the Harbour Master for the Humber. And they relate

one, to the existing provisions relating to the licencing of works and then second to the general control and safety regime on the river

17:29

and if I can deal with each of those in turn.

17:32

So licencing currently under the legislation and it's the Humber Conservancy Act 1899, Section 9 of that gives the Conservancy authority for licencing works in the Humber. So the Conservancy is 1 body who's from whom consent is required in order to licence work such as a new Jesse.

17:59

That section enables the Conservancy to attach conditions relating to the construction of works and their operation.

18:09

The DCO, as with most CEO's, is a streamlined consent procedure and what that proposes is to disapply Section 9

18:23

parts

18:24

through the protective provisions for

18:27

the Conservancy maintains the power

18:31

to apply conditions relating to both construction and operation of the jetty.

18:41

And that's an approach that has precedent, that's an approach that was taken in the able Marine DCO. It's obviously more broadly the President of applying A streamlined consenting procedure happens in in a number of DCOS

18:58

and we say that's obviously a sensible approach given the statutory responsibilities and duties on the harbormaster

19:07

to retain for his control the conditions relating to safety. So that's that's one point and that of course would control the operator, birthing etcetera. There may be conditions on, you know, number of tugs, speed etcetera that sort of those sort of controls

19:25

turning them to the general regime, which is more relevant in terms of the exclusion zone and the speed limit

### 19:35

that general regime applies across the Humber to all infrastructure within it. And broadly, the Harbour Master and the Conservancy are required to manage safety of navigation in accordance with the Port Marine Safety Code.

### 19:54

In practise, the Harbour Master sets marine procedures which form part of the Marine Safety Management System, the MSMS, based upon risk assessment and that is designed to reduce risks to ALOP.

## 20:10

As low as reasonably practical.

#### 20:13

That safety regime is affected through a number of different measures. They they're addressed in our written representations, but they include pilotage, the VTS which provides the oversight and scheduling and management of vessels in the estuary aids to navigation notices to Mariners, Humber passage plan etcetera and and if the panel would like further information on any particular measure, we can of course provide it.

## 20:39

But in light of the questions you have today, it's worth spending a little bit of time addressing

### 20:47

bylaws, general directions and special directions.

## 20:52

So, as as has already been stated by Mr Beattie, the current bylaws are the Humber Bylaws 1990. They're made under section 12/2 of the Associated British Ports Act 1987 and the breach of a bylaw is a criminal offence.

### 21:08

That's by law 40 and as Mr Beattie has said, by law 14 already includes the speed restriction and again that applies across the Humber. And there's the proposal is not that that essentially would remain in force, wouldn't change

## 21:26

general directions which are relevant to the exclusion zone. They can be issued by the Conservancy with consultation of certain bodies, and that's under section 6 of the Transport and Docks Act 1972. And they can be made for the purpose of promoting or securing conditions conducive to the ease, convenience or safety of navigation in the Humber.

## 21:50

So as you've heard there's currently a general direction regarding the 150 metre exclusion zone IT and we would propose if you would like it to put that before you. So you can see that

and the the proposal would be here

22:07

that effectively what's been proposed is that would either be extended

22:11

as part of the same general direction just over a larger area to include I guess

22:17

the harbour master also has powers of special direction

22:22

and these are

22:24

it can be that there's no requirement for them to example being writing there can be made orally, they are directions which require a vessel to comply with the requirement made under a general direction or simply for regulating ease, convenience or safety of navigation, movement, mooring, unmooring of a vessel. We can provide you with the full statutory framework for that.

22:50

The breach of either a general or special direction is a criminal offence,

22:54

but what is particularly relevant is that additionally the breach of a special direction

23:02

bring gives the Harbour Master powers that if it is not complied with

23:09

the Harbour Master or the dock Master, the dockmaster can also issue special directions. They can put persons onto a vessel in order to shore, ensure that it is complied with.

23:23

So the standing back what one can see is that there is a comprehensive statutory regime

23:32

where the Conservancy

23:35

has a number of powers open to it in order to regulate and to ensure the safety of navigation on the Humber.

23:45

A comprehensive not not only in terms of geography for the area covered by the Conservancy, but also in terms of the breadth of powers and potential for enforcement.

23:58

Those powers are flexible,

24:01

labelling the Conservancy and the harbour Master

24:04

to react to what changing circumstances, and that could be the introduction of new infrastructure.

24:11

One example it could be changing weather, tidal conditions or indeed frequency of vessels entering the river and incidents, et cetera. And it's essential as the hub of mask. From point of view, the hustle of that flexibility is maintained.

24:28

What doesn't happen across the Humber

24.31

is that when individual pieces of infrastructure are granted consent, they lay down fixed safety procedures

24:39

going forwards

24:41

because that would in effect constrain the powers of the harbormaster.

24:46

And so and that is entirely consistent with the statutory regimes. And of course, the principle that is known colloquially as the Gateshead principle, which is effectively the a planning decision maker, should assume that another statutory regime

25:05

works.

25:07

Will will hear, for example, address safety considerations on the River Humber,

25:16

and we can we can provide further written representations on that. That principle, we say, is reflected in Section 145, subsection 2 of the Planning Act.

25:28

And that's makes clear that, in order granting development, consent

may include provision changing the powers or duties of a hobby authority, but only if the development to which the order relates, is, or includes the construction or alteration of harbour facilities and the Authority has requested the inclusion of the provision or has consented in writing to its inclusion. So Parliament has recognised the importance of the statutory function of the Conservancy.

25:59

So

## 26:01

sorry that was a bit long, but but hopefully it provides a good framework for when we look at, for example, the the speed limit which is already in the bylaws

### 26:13

and the exclusion zone which would be proposed to be affected through a general direction.

26:19

Umm,

### 26:21

that's that's the framework within which it will sit and that is also it comes on really to the last question on item three of of why we would say it would be inappropriate for the CEO to contain those requirements.

26:37

Thank you.

26:40

And then I'm sorry Sir, I should add that if you want to

# 26:43

hear from the Harbour Masters to the rationale behind the speed limit or the exclusion zone then that might be useful. I don't know. Yeah, that was that was I was just going to say that that was enormously helpful to sort of take us through that, that sort of the legal process. And at some point I will come back to the applicant just to sort of seek their views on that. But I think it will be helpful to sort of understand that as you say a little bit more from the Harbour Master in terms of those measures and the and the rationale behind those to sort of help us understand those.

## 27:12

Yeah. Good morning. Andrew Furman Harbour Master Humber

27:16

and the

27:19

reason for for the measures is is based in risk assessment in in line with Mr Beattie's summary of of the navigational risk assessment just to give to split the two apart. The five knot speed limit that applies to all jet is on the Humber is mitigating the risk of a vessel alongside being affected hydrodynamically by a passing vessel.

27:44

UM.

### 27:46

that can cause the vessel to range on the birth, move on the birth with no damage. It can say, I'm just sorry

#### 27:53

hydrodynamically Bush if you could if you could explain sort of technical terms like that that would be that would be really helpful to to us. I think I I will. So we know a reasonable amount, but perhaps as soon we don't know anything and then terms like that would would help us.

### 28:07

We'll try. It will certainly be a simple explanation. So the the vessel moving along the river is is pulling an amount of water with it. So the the effect on the water around the vessel as it passes through has then an effect on on other objects that are in that water in the in the most simple terms, so we call it pulling, pulling the vessel is pulling the river along with it. So that can have a vessel, an effect on a vessel alongside which can move it on its moorings. It can cause the moorings to break

# 28:37

if that vessel is working cargo it in the case of the IoT potentially affecting the pipeline or the vessel can break off the moorings. So that that risk of breakout, all that risk to the vessel alongside is the risk that's being managed by the speed limit,

### 28:55

the 150 metre exclusion. That's a general direction

### 29:00

is more it absolute genesis more in the potential for collision of a vessel passing with either a vessel alongside or the jetty itself

## 29:10

was specifically brought in following an incident in 2000 when a vessel was did make contact with the vessel alongside the evening of male terminal they protect Marine Accident Investigation Branch were involved with that. So that requirement has been in place since 2001 following that incident. So that 150 metres, the 150 metres is more around

### 29:35

the potential for collision and proximity. The five knots is about hydrodynamic force and the the vessel being affected in that way.

## 29:50

Thank you and thank you for that explanation. That's that's helpful.

I think probably what I do now say ask the applicant if there's anything that they wish to to add or respond to. Thank you Sir Harry Would Philpott on behalf of the applicant. So far as the technical matters that have been explained and also the helpful description of the legal context, we we don't we agree with all of that. We don't take issue with any of that. The only thing I would add and so far as the legal issues

## 30:26

just too short points in relation to the Gateshead principle which has been identified. The 1st just to give you the case reference and to see if you'd like a copy of the decision put in it. It's decision called Gateshead Metropolitan Borough Council versus Secretary of State for the Environment and the references 1995, Environmental Law Reports 37. It's a principle which has then been reflected in a series of later

## 30:58

that decision. So it's long established, but that's why it's called the Gateshead principle, because it comes from that original case. The the second point I wanted to make is is just to

## 31:10

a little bit in terms of what lies behind that principle and the rationale for it. And there are broadly 2 points that I want to emphasise there. The first of course is that duplication of other regulatory controls is in principle unnecessary that. So it goes to the question of necessity for imposing a a, a requirement.

## 31:34

But the second point is that there is an obvious practical problem in terms of the public interest and and also the interests of the undertaker, the operator. In this case, it's because there's a very obvious risk of creating inconsistency between regulatory regimes and their requirements

## 31:57

and or potentially fettering or otherwise interfering with the discretion that's been bestowed on the relevant regulatory bodies in the exercise of their duties in the public interest. So you either have the risk of inconsistency whereby the operator is faced with potentially inconsistent rules and regulations governing the same activity,

## 32:19

both of which, as you've, you'll be aware from what's been said about the marine controls. But you'll also be aware in terms of the options for enforcement of requirements under the Planning Act, carrying with them criminal liability and criminal penalty. And an inconsistency in that context is clearly contrary to the public interest. But the alternative is that the regulatory body in this case that the Conservancy and the Harbour Master Humber, it has its discretion, its flexibility, fettered

## 32:51

effectively by the need to avoid that inconsistency and those two things go together. So it's a principle that is long established, but the rationale for it is important to understand when asking the question, is there any need, is it appropriate to impose a control on the development consent order that deals with these matters? And that's the only point I wanted to add.

Thank you very much.

## 33:26

I'm just wondering whether actually we sort of moved the items around a little bit given we've sort of gone a little bit into protective provisions and some of that side of things. And and particular .3 on the agenda, which was sort of looking at,

### 33:41

I think probably the comments you sort of alluded to in terms of making sure that the DCR didn't include particular clauses that that may well interfere with with the harbormaster sort of powers. And I wonder whether we might sort of move, move into that. It just seems to feel like sort of a natural way to sort of carry on on the discussion. And perhaps if I can look to the harbour master in particular to sort of look at a, I suppose in terms of the protective provisions in particular and your understanding of of of where we are with those in terms of whether they're agreed or not or what the likelihood is of them

### 34:12

being agreed. And then perhaps then sort of looking at that sort of Third Point on the agenda in terms of,

#### 34:20

I think we're in, in your representations, you sort of identified at that point about making sure that the C didn't contain particular references. So if we could sort of move on to that then that would be helpful.

## 34:32

Thank you Sir. Victoria Hutton for the harbour Master Humber. So I think I've made all the submissions in terms of why it's important that the DCA doesn't constrain or or fetter the discretion of the of the Harbour Master. And I

### 34:46

entirely agree with the comments have just been made by Mr Philpott

### 34:52

in terms of the protective provisions, so that they are agreed between the parties. Of course if the examining authority have any comments, suggestions then we will take those away. But yes they are agreed.

## 35:08

Thank you. I think that's that was the position we understood but it's helpful to sort of get that that that confirmed

## 35:16

think then that probably moves as

35:18

from three back to two in terms of the agenda and one of the things we were looking to do was sort of sort of explore this with CLDN and and IT in particular. But given they're not here I think it's going to prove a little bit difficult to sort of make the progress that perhaps I think we thought we wanted to. But

### 35:38

I think I'd still like to sort of pose the question to the applicant in terms of the the implications of those mitigation measures or any wider implications of those mitigation measures. I think we've seen your your submission at at DLT in terms of the the further assessment that you've undertaken with regards to sort of the predicted travel times that that would that those mitigation measures would would result in. And and I think we sort of found our visit yesterday to the the sort of navigational sort of systems very helpful in terms of explaining how all the other sort of things work. But I think it just helps to sort of give us sort of

### 36:10

a bit of a sort of privacy or of that bit of work that's been done and what's with us, if we could. Thank you, Sir. Hereward Phillpot. I'm half the applicant. I think in terms of that element of the work, that's a matter for Mr Beattie who who can provide the privacy that you seek.

### 36:28

Hi, yeah, John Beattie for the applicant. So I think as I mentioned in my earlier response,

#### 36:33

the measures, the mitigation measures have been aligned with Eminem oil terminal in terms of speed and approach distance restrictions and it provides consistency for other passing traffic and ensures the channel width to the north is maintained for all that traffic. And now these were discussed at the workshop I mentioned undertaken during the navigational risk assessment, which was attended by port users including IoT and CLDN. And they were agreed to be appropriate with no dissenting voices as I mentioned.

## 37:05

So when vessels are visiting IoT they won't be able to navigate to the north of iget.

## 37:11

This was demonstrated in the simulation work carried out by HR Wallingford. So they simulated 4 arrival and departure manoeuvres to IO T birth 3, which is the closest one to I get, so the one that would be

## 37:25

the most potential to be affected, the closest neighbouring bath.

### 37:29

And all those runs were assessed to be successful and there were no significant issues that arose.

## 37:35

So the simulation study that was at 192 in the the library

37:40

like quoting from that it said the changes in approach will be marginal and would not be expected to result in any significant additional time or resource requirements.

### 37:52

So the IoT operators obviously are not here today, but I did notice in their deadline one submission they specifically addressed the speed and distance restrictions in Rep 1110. So what they said was increasing the region of this exclusion area would have no effect on operations at the IoT as the vessels arriving or departing from the IoT are already operating at low manoeuvring speeds during this phase of their passage.

### 38:22

So I think that covers Eminem oil and terminal traffic to the United Bath. I'm just going to go on for other passing traffic to the north such as the CLDN vessels to and from killing home. Again looking at the simulation work that was carried out

### 38:37

8 Quoting from that it said

### 38:40

it will impose no additional restrictions on the ability of ships to navigate safely in the main channel when compared with the existing simulation.

## 38:51

So as you mentioned, Dynatech also reviewed the ship tracking data we used as part of the NRA work to understand how the speed restrictions will affect the regular passing vessels operated by CLDN to and from killing home further upriver. So that assessment was carried out without and with vessels at Immingham Oil terminal that will influence the impact of the speed limit I get. So as we mentioned this five knot speed limit that applies, it only applies when there are vessels actually at the birth or working at the birth.

### 39:24

So you can imagine if I OT has a vessel at its birth, vessels are other vessels are already having to slow down when they're passing that birth. So the cumulative impact of I get would be less. And looking at our data, the Eminem oil terminal jetties one of those tends to be occupied the vast majority of the time. We have to make greater than 90% of the time. So it means vessels would already be slowing down in the majority of cases to pass that birth.

### 39:54

So in terms of the impact of I get you know I get about 3-3 hundred 35360 metre long. So when you calculate it, the additional time for having to slow down for Iget was around 2 minutes. Slightly less if there is that situation where there's already a a vessel birth to IoT, which is the majority of cases, but yeah, the additional.

### 40:18

Time impact of that speed restriction is round about two minutes and that's not considered to be significant in the context of those vessels overall voyage time. You can imagine if they're crossing the North Sea, a couple of minutes isn't a major proportion of that overall voyage.

Now what's going to go on? And like I've I was going to quote from the harbour Master Humber in his red written representation on that, so I could do that. Or whether you prefer to hear it direct from him.

### 40:50

I think I probably prefer to hear direct from him, as you probably gathered. But yeah, I'll let you finish unless it's in there.

### 40:56

And I think that was all really. Yeah, just to. Yeah. So that was our conclusion when we looked at the speeds and the impact, looked at the simulation studies, really the findings were no material impact.

### 41:11

Thank you for that. And if I could pass to the harbour master if there's anything that you wish to to add or or follow up on on on that.

### 41:22

So Victoria Hutton harbour master number. So there's nothing we wish to add to that. OK, thank you, that's fine. Just what one sort of question sort of clarification from from myself. So I I've got the understanding of how it all works in terms of the 150 a permanent exclusion zone regardless of of ships being berthed in terms of the five knot and potential future cargoes. Does that just apply to our to the ammonia delivery or would the five knots speed limit apply to

### 41:50

than any ship regardless of what cargo is being delivered. So if it's a CR2 ship for example, would that still apply the five knots speed limit. So I would focus on behalf of the applicant. The as I understand the bylaw, the bylaw applies generally to shipping and that I'm getting a nod that I've understood that correctly. If if that's sufficient to answer the question, then it is definitely affect. Yeah that's what I'm sort of giving that by law is there regardless of of whatever cargo is being handled. It's not

## 42:22

specific on, it's not specific to the fact that it it's an ammonia delivery and and any risks associated with the product. It's it's the risk associated with with the ship etcetera the vessel. OK Sir Hereward Phillpot on behalf of the applicant. So it it would probably help on this if we put in as part of the post hearing notes a copy of the relevant extract from the bylaws. It's umm, it's bylaw 14 three as I understand it, heading, navigation and and speed of vessels.

## 42:55

And it says the master of a vessel shall ensure that the vessel does not exceed a speed of five knots when approaching and passing any jetty, when any vessel is mooring, moored or unmooring at the jetty. So you can see from that that it's expressed in general terms.

# 43:14

I think that would be helpful to to include that and we'll capture that as a as an action. Now to thank Brilliant.

OK I think that answers those sort of questions on on that side of thing. I think the next sort of questions I have probably relate to to the Harbour master in particular and and it sort of

### 43:41

should the CDCR be made sort of what would your role be, how would your role be enhanced? Would you presumably you would sort of take on the tresponsibility for the the new terminal and the jetty and how would that sort of operate and how would that work?

## 43:58

Victoria Hutton, Harbour, Master Humber.

## 44:02

So would it be helpful to look at the protective provisions and that element and then talk about the more general points, Yes, that's fine. Yes, that's a good way to do so in the draught Co Sorry I don't have the reference to hand, but it's scheduled for other protective provisions and it's part one deals with the conservancies protective provisions.

44:25

Umm,

44:29

sorry, I've got the wrong one on my screen.

44:45

Yeah, so,

## 44:48

so the relevant paragraphs in terms of construction, paragraph three, approval of detailed design of tidal works. So this provides prior to commencement there's a requirement to submit to the Conservancy detailed plans. And then

## 45:08

you'll notice that the Conservancy has power to impose requirements under subparagraph 2

# 45:17

and which makes clear that consent may be given subject to any such reasonable requirements as the Conservancy may make for the protection of trafficking, flow of regime of the river's use of its operational land and performance of any of its functions. So that's in terms of

## 45:36

construction, that's probably the most relevant paragraph. And then of course the the applicant would be required to comply with those requirements.

45:49

The

next most relevant paragraph is para. 16 Which is operating procedures.

45:59

So this requires the applicant to submit to the harbour master for approval or written statement of operating procedures for access to an egress from the authorised development

46:10

and must only operate in accordance with such procedures is approved.

46:16

So I don't know if you want

46:18

more detail from the Harbour Master in terms of sort of practically how that would work. So I could hand over to him now to to give you that that would be and then come back to understand that how that that clause works.

46:33

Andrew Furman, Harper Master Humber.

46:38

As Miss Hilton has pointed out, the DCO will have protective provisions, but really from my practical point of view, that's replacing Section 9 of works that could be carried out today elsewhere that that aren't under a DCO.

46:53

So that would be.

46:55

46:57

A procedure that we've been through many times through new developments, both both large and small,

47:04

risk assessment carried out

47:07

and any works that go on, on the river. We make sure they're carried out safely through approval of contractors, approval of works requirements for river users, promulgation of information and then similarly with operational procedures both through our involvement through pilotage and our control of vessels as VTS, we would be very involved in those procedures as well.

47:33

So actually for the larger vessels, for this as an example, the larger vessels for this jetty for the ammonia carriers would potentially be over 40,000 tonnes deadweight and therefore would come under a set of procedures called the Humber passage plan which would need to be developed. And all our development of procedures and and risk assessments are all involving all stakeholders. So whether that's pilots, towage companies, the operator themselves, other river users, Sir, it's a well worn routine, although through DC

### 48:05

go through a separate set of legal requirements, but that's that's really the way it goes.

### 48:14

Thank you. Yeah, that that's helpful to get that explanation. Thank you Sir. And then Victoria Hatton Harbour Master Humber, just to complete the picture. And so that's the operation of the jetty and its construction. In terms of the general controls and other river users, I mean the short answer is that that is no different from any other infrastructure in the Humber.

### 48:37

And in terms of responsibility, whose responsibility, who's responsible for operating safely, The answer is pretty much everyone.

## 48:48

I mean obviously under the de Co there are the powers and responsibilities on the Conservancy. I've gone through those. The Conservancy would retain responsibilities for managing safety on the Humber more generally and and complying with the Port Marine Safety code. And I've I've taken you through that and how that's affected through a range of measures. The port of Immingham itself and the Dockmaster also has responsibilities, statutory responsibilities.

## 49:17

They can impose general directions and special directions. They also comply with the Port Marine Safety Code.

### 49:24

Vessel Masters themselves have responsibility for safety. So under the Bylaws,

### 49:32

for example, Bylaw 7, requirement to maintain a continuous listening watch on the on the appropriate channel

## 49:40

on by law 9, responsibility to navigate the vessel that due care and caution and at a speed and manner which shall not endanger safety of any person or any other vessel.

### 49:51

There are also offences under the Maritime Shipping Act 1995. It's an imprisonable offence to conduct yourself in a in a manner that endangers structures or individuals. We can provide you with a copy of that provision.

50:07

And then there's also a duty on vessel Masters under section 11 of the Transport and Docks Act 1972, which makes clear that where a general directional special direction is given, that does not diminish in any other way the responsibility of the master for their for their vessel and for the persons on board for the cargo or any other personal property. And similarly, the Pilotage Act, section 17, section 1716 and 17 made clear

## 50:38

that having a pilot on board doesn't diminish the responsibility of the master. So the answer is there's a whole raft of responsibilities on on various people and this that would remain in place

## 50:54

with this development.

## 50:59

Thank you, Sir.

#### 51:04

Thank you very much. Is there anything the applicant wishes to add on on those Harewood folk long half the applicant, no Sir would endorse all of that. We don't have anything further to add. Can I just add a quick ask a quick question in terms of from a from a planning sort of perspective once or should the development be in place is that then become part of the operational port from a general pretty development procedure position

#### 51:31

Sorry would thought on behalf of the applicant. So I I need to take that away because the the precise location of the port boundary is not something I've got particular instructions on but I I my understanding is that it may not include all of the development. So I just need to take that away and get clear instructions on it. And I think one of the things we discuss

## 51:52

day before yesterday I think and then Tuesday hearings was was that sort of note on on future consent. So if that can be included in that that would be helpful I think indeed. So we'll we'll pick it up in that note. Thank you.

### 52:14

I'm just checking through my notes and I think actually that probably has picked up everything that that I wanted to

## 52:21

to raise questions or was or was seeking clarification on. And

## 52:29

so just before I suggest we sort of move on to the next item, can I just see if there's anything else that anybody wishes to raise on on this item?

## 52:38

No, I'm I'm not seeing anything and conscious that that you may well be leaving us. And I think the action point in terms of what will probably come to you is, is the provision submission of those bylaws

that that you refer to. I think I think that would be that would be helpful. But like I say we will capture those and then they'll be available on on the on the website at some point next week for you just to just to check. But thank you. Yeah,

### 53:01

I think that brings it close to sort of item number three and I'll propose to move on to to item number 4

### 53:10

Thank you, Mr. Hunter. So agenda item four Major hazards and accidents.

### 53:16

So question for the applicant. So play to 8 and nine of the planning statement. Chapter 7.1 of the year ESA P-226

## 53:27

shows the proposed layout of the hydrogen production units on the east side work #5 and the West side work number seven, with each production units having a liquefier associated to it.

### 53:39

Can I ask how did the applicant derive the number of hydrogen production is required and take account of available land, space and safety factors

#### 53:47

to the applicant?

### 53:49

Thank you Sir Harry Wood Philpott on behalf of the applicant. I'm going to ask Mr Tymon Robson from Air Products to respond to this

# 53:59

good morning time and Robson Air Products are speaking for the applicant.

### 54:04

The the facility that is proposed is intended to be constructed in such a way that the production capacity

## 54:14

of hydrogen can be progressively increased as the market for green hydrogen evolves and this is explained in response to question 1.13.2.1 which is in Rep 1034. And so at the outset of the process, this is set as a project requirement for the design of the facility.

### 54:40

By way of further up explanation, Air Products has decided to build multiple smaller hydrogen production units and there will be six once the project is fully constructed. As this offers us a number of advantages. As explained, it allows us to build up capacity for hydrogen production over time as both the supply of green ammonia and the demand for green hydrogen

increases.

## 55:14

It also allows us to be able to start production of green hydrogen sooner as the the phase one hydrogen production units can be in operation whilst later phases are still in construction.

## 55:33

It it also provides us a level of reliability to the overall facility in that if one hydrogen production unit is offline requiring maintenance, other units would be operational and so we can still maintain a reliable hydrogen supply to our customers.

## 55:57

Another advantage is that the constructability of the overall facility can be smoothed so so that we avoid high peaks in construction labour with the associated impact on on traffic by building the the larger facility in a phased way.

### 56:20

So, so ultimately there is a trade off between cost and operational and construction flexibility that we have to manage in selecting the number and the size of the hydrogen production units.

## 56:38

Umm,

## 56:40

essentially having having fewer larger units would provide benefits in terms of cost and in terms of land footprint.

## 56:51

But with that, it brings a number of disadvantages. It's less easy to let capacity growth match market demand because the larger units take longer to build and then they add a much larger increase in hydrogen production capacity. It will also push peak construction numbers up with with adverse traffic effects and the unit will be much taller with greater impact in terms of scale and massing

## 57:25

and any operational issues

## 57:29

resulting in in a in a trip or maintenance would have a much greater impact on the output of the of the facility.

# 57:39

On the on the flip side if we went with even smaller units than those that are proposed that would increase costs and land requirements and ultimately eventually it would affect the the commercial viability of the overall facility. So we have this trade off to play between

between cost, land space and operational construction flexibility.

## 58:06

And it was decided by Air Products that for this terminal, given the immature state of the hydrogen market and the need for that operational flexibility that 600 production units to meet the intended output capacity was the optimum balance of cost time to 1st operation

### 58:29

and and the flexibility to adjust the market demand.

## 58:40

Thank you, Mr Robson. That was that was very useful

## 58:45

in terms of my second point on this agenda item that relates to the KOMA regime and how how the requirement of this piece of legislation aligned with the construction phases.

#### 58:56

If the applicant go through each of their submissions as required under the COMA regime. And the timings of these

#### 59:04

and how more or how they align with the construction changes for those development.

## 59:10

So Harry, we've focused on behalf of the applicant for for this matter and indeed generally for this item I'm going to ask Mr Robson to explain. So although on this occasion I'll introduce him again, from here on in I'll just let you direct your questions to him directly.

# 59:28

Timon Robson Air Products speaking for the applicant. Yes, by by way of background, I'll explain the required submissions under the coma regimes and how they function and then I'll I'll explain how we intend to handle them on this on this project.

# 59:47

So the safety reports, submissions that are required under the coma regime are the pre construction safety report and we're required to issue this a reasonable time before the start of construction and that's coma Regulation 9/2.

# 1:00:07

We, we then moved to the preoperation safety report and and we're required also to issue this a reasonable time before the start of operations again regulation 9/2.

### 1:00:19

And then this progresses to the operational phase safety report which is required to be issued within

five years of the pre operations safety report and that's a regulation 10/1. And and just by way of further explanation, these safety reports are all stages in the development of of the overall safety report for a facility rather than being standalone documents in their own right.

## 1:00:50

Put another way, once the safety report has been issued at pre operation stage relating to the operation of of the first phase of the project, you cannot then revise the preconstruction safety report.

### 1:01:06

The safety Report remains alive document throughout the facility's life,

### 1:01:13

and it's required to be revised at least every five years or after a trigger event, such as a change to the inventory of hazardous materials. From that previously described and assessed

## 1:01:28

Air Products have engaged a process Safety consultant Gex Unlimited who will be assisting us in the preparation of these various Coma Safety Report submissions.

### 1:01:42

If I turn to those safety reports submissions individually, I'll explain how we propose to handle them. The pre construction safety report will be submitted providing full details and assessment of all of the hydrogen production facility, so all phases of the construction. And this report is intended to be submitted at the end of April 2024.

### 1:02:11

So the preconstruction safety report provides an initial risk assessment using the best information available at that time with conservative assumptions so that it can provide the worst case risk profile for the facility considering both the initial operation but also the facility upon completion and full operation. So the overall aim of the preconstruction safety report is to provide

### 1:02:43

as much detail as possible regarding the facility upon completion thereby facilitating risk informed decision and a lamp demonstration for the entire facility rather than isolated consideration of the specific phases.

### 1:03:04

So as as the safety reports move through this progression,

## 1:03:11

that's the pre operation safety report stage. The risk assessment conducted during the pre construction phase will be stage will be revised to provide a more detailed assessment taking account of the construction, phasing and likely construction workers at that time, the latest design details available and any operational details. So subject to discussion

## 1:03:43

with the competent authority,

### 1:03:47

it's proposed that the pre operation safety report would be submitted for phases one to three

## 1:03:55

only considering the phase progression up to including operation at phase two with ongoing construction for phase three. So putting it another way,

## 1:04:10

the pre operation Safety report and its risk assessment,

### 1:04:17

it including the risks and the hazardous materials associated with phase one being operational and phase two in construction

## 1:04:27

and also those risks and hazardous materials associated with phase one and phase two in operation with phase three in construction.

### 1:04:38

And so it's proposed that the pre operation safety report said set out in that way would be submitted in 2026 prior to the commissioning of phase one

### 1:04:57

as we we continue through the phases of the safety report. So the first issue of the operational safety report is, as I explained, required at least within five years of the preoperation safety report and it's anticipated at that point that phases one and two would be in operation

## 1:05:26

and phase three in construction. So at that point the safety report

## 1:05:32

and the risk assessment would be revised

## 1:05:37

and would cover the risks and hazardous materials associated with phase one and phase two in operation, while space is 3 to 6 would be in construction

## 1:05:50

and it would also consider the risks and hazardous materials associated with phases one to six

### 1:05:59

being fully operational and all construction therefore having having ceased.

## 1:06:06

So, so if I summarise this this approach,

1:06:10

this is the approach and aims to ensure that the safety report

1:06:15

accurately identifies and evaluates the risks for the subsequent 5 year

1:06:23

in accordance with the project construction and Commissioning Schedule.

1:06:27

So in this way the current safety report

1:06:31

will provide a demonstration of safe design and robust safety management systems systems throughout that applicable. Without the requirement

1:06:44

for interim modification submissions for each phase,

1:06:52

the submission schedule of the safety report

1:06:56

will be reviewed

1.06.58

against the progressing construction and commissioning schedules

1:07:03

and and the phasing to ensure that

1:07:07

the development of each safety report

1:07:11

in that the analysis accurately reflects the construction and operational phases in the subsequent 5 year.

1:07:22

And if there's any change to that

1:07:27

and the status of operation phase of the construction gives rise to any scenarios that have not been assessed.

### 1:07:36

For example, should phase three be ready for commissioning earlier, then obviously the safety report and the associated risk assessments would also have to be revised and resubmitted earlier.

1:07:56

Thank you. Mr Robson, if I can just ask to if you could confirm,

1:08:01

when you submit each stage of the safety report, do you then need to wait for the competent authority to actually respond back and give you the go ahead, or is it merely purely just a submission

1:08:12

that's required?

1:08:15

Timon Robson. For the applicant, it's it's not purely A submission. There is a

1:08:22

an interaction with the with the competent authority at each stage And so we would expect not formal approval, but we would expect

1:08:33

governments to come back and if necessarily a a a revision.

1:08:40

Thank you Mr. Robinson. So that moves on to the next agenda item. So point sorry,

1:08:47

so we'll minus minor changes can be expected as the design process evolves,

1:08:53

which I assume with the majority of these changes unlikely to affect the details submitted to us as part of this planning application.

1:09:02

Is the applicant aware of any changes which they can possibly foresee that may affect the application, such as layout or additional process equipment as part of this design review process or as regular duty regulatory intervention?

1:09:20

Timon Robson speaking for the applicant

1:09:24

as as outlined in the Consensus and Agreements Section Rep 1010. The, the key permits and consents which are required as as I'm sure you're familiar is a hazardous substances consent, the coma regulations and the environmental permit

### 1:09:42

we've mentioned previously the hazardous substances consent is already submitted. The pre construction safety report under coma will be submitted shortly and the and for the environmental permit, the application is is also to be submitted shortly and so we will have these three permits

### 1:10:02

running concurrently. To to answer your question,

### 1:10:08

it is possible, although not expected, and we're not aware of any situation arising at this stage that the regulators may require further mitigation measures

## 1:10:22

to be as part of these consenting processes, which may affect the layout and the design. As I said, we're not aware of any of this

## 1:10:34

coming to the fore, but the parameters set out in ES Chapter 2, AP 044 Table 2.2 and also in DCO Requirement 4 Rep One

### 1:10:50

O 10 provide us with a level of flexibility to the design in terms of parameters which we believe will be sufficient to cater for any request from those consenting processes which may arise.

## 1:11:09

By way of example, should should the capacity for the on site fire water storage be requested to increase or or even interconnection between firewater systems? We believe that within the maximum height specified in DCO requirement 4 and the other flexibility which we have, then we could

### 1:11:34

incorporate any such relatively minor changes without impacting the overall DCO submission.

## 1:11:44

Thank you Mr Robson. Before I move on to the next point on this agenda item, is there any comments about parties present here online? Would like to make

## 1:11:55

keep not seeing any hands.

### 1:11:58

So the Third Point on this agenda item is regarding the generation nation through ammonia cracking.

### 1:12:04

So in deadline one Rep 1-033 you stated that the non-technical summary was incorrect in that state. All the 90 generated on site would be consumed in the process.

## 1:12:19

And what you've said is that the nitrogen the required prior to purge pitch pipelines, pipes and vessels will be generated on site by a nitrogen generation unit.

### 1:12:28

What is the reason why night and generated from the ammonia cracking can't be used for purging and other processed usage? Perhaps start with the purity of the nation produced from ammonia cracking.

### 1:12:45

Certainly yes

## 1:12:48

there there are a number of reasons why that that the nitrogen produced in the process is is not suitable. But I will start with the question of of the process and and I think as way of background, I think a high level explanation of of the cracking process would would help.

### 1:13:09

So in the hydrogen production unit, the ammonia passes through a furnace in which the ammonia is cracked into nitrogen and hydrogen.

1:13:21

## 1:13:23

And this gas stream is then passed through a process unit which extracts the hydrogen element of that gas

## 1:13:32

leaving an off gas stream which is made-up of nitrogen approximately 80%.

### 1:13:41

But it also contains some hydrogen and some ammonia in that off gas stream.

1:13:50

# 1:13:52

In the in the process as as part of the optimisation that gas stream is then fed back to the furnace and mixed with the firing gas so that the residual ammonia and hydrogen in that stream supplement the fuel to the furnace. And and so that through that process the ammonia, the nitrogen component is then mixed with the flu gas from the furnace and

## 1:14:23

ultimately admitted through the through the stack.

## 1:14:28

So in in terms of

## 1:14:31

the the reasons why it's inefficient

### 1:14:37

in in terms of energy consumption and process infrastructure to be able to capture that nitrogen

## 1:14:47

rather than using it as a supplemental supplementary fuel,

## 1:14:53

I'll, I'll I'll just explain a couple of those reasons.

### 1:14:58

As I mentioned, the nitrogen concentration in the off gas at the outlet of the hydrogen production process is approximately 80%.

## 1:15:07

That is very similar to that there

### 1.15.12

and it's also at a similar pressure to air and and so just at very high level

### 1:15:22

the level that the, the quantity of process equipment and energy consumption required to capture that nitrogen is going to be similar to capturing it from there. It's dealing with a very similar composition of of stream

## 1:15:43

and and so merely at at at high level there's going to be no efficient efficiency or recovery benefit to trying to capture that nitrogen rather than

### 1:15:55

using air to generate it

## 1:15:59

And and the other factor to

## 1:16:02

to note is that production of nitrogen from air is is a very stable and a very energy efficient process

### 1:16:12

whereas if we were to capture the nitrogen from the off gas there's various process complications that would make it less efficient in in a number of ways. The there would be variations in flow

1:16:33

in the

### 1:16:35

in the off gas stream from the hydrogen production unit, which invariably makes any

# 1:16:42

capturing process more difficult to manage and less efficient.

### 1:16:49

The the remaining ammonia and hydrogen from that stream would still have to be rooted back to the furnace, so it wouldn't have any saving in terms of pipe work and infrastructure.

## 1:17:02

The the nitrogen still needs to be liquified

### 1:17:06

for storage and that liquefaction as part of a separate process rather than as part of a standardised air separation unit is less efficient.

## 1:17:23

And and purely

## 1:17:26

with capturing it from air, we can have a single unit that serves the entire facility.

# 1:17:33

Whereas if there was a nitrogen capturing process attached to each hydrogen production unit or at least a group of them, we would end up with more

### 1:17:47

process equipment

### 1:17:48

and with it higher energy consumption than if we could standardise on a single air separation unit. So all of these factors,

### 1:17:59

I mean it's it's more expensive and more complex and more energy intensive to try and capture the nitrogen from that off gas stream than it is to have a a separate nicer and generation package using air.

### 1:18:18

Another key and quite fundamental point is that we've mentioned in our previous explanations that the nitrogen is used for

1:18:31

for purging

1:18:33

during shutdowns and emergencies

1:18:37

and so that means we need the nitrogen when the hydrogen production units are offline.

1:18:44

## 1:18:46

Whereas the nitrogen would be generated when they're online. So we have a sort of chicken and egg availability problem and purely from a safety reason, the nitrogen supply needs to be independent from the process. Otherwise a single

### 1:19:02

point of failure would take out both the nitrogen supply

1:19:08

and the and the process. So I think for all of those reasons

1:19:14

we we have concluded that we're better off with a separate standalone

1:19:21

nitrogen generation plant running on air.

1:19:27

Thank you, Mr. Robinson. I understand the reason why you need to generate an action separately, but just going back to the efficiency, so am I right in understanding the the hydrogen produced from the ammonia will contain

1:19:43

20% ammonia and hydrogen, therefore not all the ammonia is converted into hydrogen?

1:19:53

Yes, not all of the ammonia would be converted because I've explained that any ammonia that wasn't efficiently cracked.

1:20:03

Is fed back and used as a supplementary fuel for the for the furnace, which in itself reduces the amount of hydrocarbon fuel needed in the furnace.

#### 1:20:20

It's sorry and going back to the use of that fuel to crack the ammonia.

## 1:20:27

Is the intention still then to you to replace that fuel required for cracking purposes

### 1:20:34

either with ammonia and hydrogen purely and replace the whatever fuel oil that you're currently use

#### 1:20:43

Time in Robson speaking for the applicant. That question about the use of a hydrocarbon as a as a firing gas takes us back to the carbon intensity discussion that we had in IS H1

### 1:21:03

at

### 1:21:05

At the. At this stage there are complications with using with replacing the hydrocarbon firing gas entirely with ammonia

## 1:21:21

and so at this stage we're able to meet carbon intensity requirements. Using hydrocarbon as a firing gas technology will evolve

# 1:21:34

and it's possible in the future that we may be able to look at at that scenario, but that technology development is still required.

## 1:21:47

Thank you. Mr Final point on this agenda in terms of the night news, just to confirm, would it be a single Nishan generation that would serve both productions units on the east side and the West side works

### 1:22:04

time in Robson for the applicant? Yes, that's correct. On the on the West side,

### 1:22:10

there will be a single hydrogen production unit with liquid nitrogen storage and there will be interconnection via the underground pipeline in Work 6 and the culvert in Work Four to use that single hydrogen production unit to service the full facility in in Works 7, three and five.

## 1:22:41

And in terms of size and scale, how would that compare to say a single hydrogen production unit for these nitrogen generation units? Are they approximately the same size or

1:22:54

smaller or larger?

1:22:58

Sorry, can you just clarify that compared to what each individual hygiene production unit will be? Size of the nation generation units

1:23:08

in terms of the single unit, yeah, of producing hydrogen just just as a way of of of explaining that size. So we would expect the the footprint of the hydrogen of the nitrogen generation unit in Work 7 to be approximately 35 metres by 26 metres.

1:23:33

And we expect that that would

1:23:38

be designed to supply approximately 22,000 metre cubes per hour of nitrogen

1:23:46

with on site storage of approximately 400 metres cubed of nitrogen of liquid nitrogen

1:23:54

that's based on. So that what I've given you you there is indicative design data based on the basic engineering stage of the design.

1:24:07

Pinterest Robson.

1:24:10

So the final point on this agenda item to NE Lincolnshire Council.

1:24:16

In paragraph 581 of your local Impact report, it states that detailed discussions with yourselves and the applicant are ongoing regarding land use.

1:24:27

What are the possible implications of land falling under a hazard zone once these have been calculated? And what could this mean for the area?

1:24:38

Martin Dixon NE, Lincolnshire Council. Thank you, Sir. I mean, I think

1:24:44

you're quite right. He's probably right to start at the higher level with generic. I appreciate I might be talking to the converted in some ways on this issue, but I think it's important to to put it in context so we understand what the issue is. So as we are all aware, the planning process includes assessments of

hazardous substance insulation. So it's through the hazardous substance consent regime which came in in the early 1990s

### 1:25:15

and the relevant hazardous substance authority is the local planning variety. So the NE Lincolnshire Council being the LPA is the Hazardous substance authority

### 1:25:28

clearly in this case what the process that is proposed and these planning permission and through the TCO process and needs a separate hazardous substance consent as well for the storage of the House of this material.

#### 1:25:45

And that's the commonality. And then this area we're quite well used to dealing with applications that involve has the substance concern because the nature of our industry, the Humber Bank et cetera.

### 1:25:57

So in terms of dealing with that application and indeed one has been submitted as has been mentioned and it was submitted on the 17th of March 23. So it's been in for a while now and and that's for the local planning priority to determine that application.

#### 1:26:18

In terms of doing that, there's consultation that occurs and doing it and relevant bodies, Environment Agency, Natural England. But crucially, and as required through the arts, the HSC, the Health and Safety Executive, and they're a key player in terms of determination of an application.

### 1:26:38

And indeed, if the HC object to an application, the local foreign finity has to take very tight consideration than that and can't seem to prove it without going back to the HSE and calling and all the rest of it.

### 1:26:54

Clearly the issues relating to the determination of the House of the substance consent application and I suppose in some ways are twofold. A busy right? Is it safe? So what? What's been put forward

## 1:27:07

and also and really, really the reason why the hazardous consent land use planning methodology and everything was put on local planning authorities back in the 90s. It was that consideration of the impact of that consent and that's done through the what is called the three zones of the consultation zone method. And so one of the first initial or one of the considerations and main considerations, other hazardous substance

### 1:27:39

incident application is what are the consultation zones around that,

## 1:27:45

the consultation room zones being effectively a zone there around it, which is in relation to safety and what uses are applicable within those zones.

### 1:28:03

I love it came out the flicks, but disaster and consultation zones came out of the the disaster flicks were not that far down the road

### 1:28:11

and it's quite a simplistic model in some ways. In land use planning terms, it gives levels of one to four to different uses and land uses

### 1:28:22

and their base and sensitivities as we as a lot of us will know. And so for example level 1 which can happen within an inner zone is a factory. There are stipulations in terms of occupancy, height and storage levels of the factory

### 1:28:38

level 2, housing level 3B, schools level 4 would be your your major football stadium and your large hospitals and things like that. So the sensitive goes up with the sensitivity use the number of people there, how conversant they are with their location etcetera, etcetera. And as we know those zones are very concentric. They go out in the zones around the inner

## 1:29:01

by his name we get Mills zone and we get the outer zone as we go out. Now clearly from a land use planning perspective one of the things that we need to be aware, our local planning priority needs to be aware of is how that can affect

### 1:29:18

the the area around it. And because sterilisation can occur as we know and that that has happened and and the other thing that hazardous substance consent and going off tangent a little bit you can have legacy houses just substance consent and it can sterilise long after the user has gone and there is revocation everything but and that that's one of the issues with it.

### 1:29:41

But they do stick and they stay and they have their zones around them and we need to be comfortable that those zones won't cause a restriction on future developments in around the site which we all may wish to see. So the extreme scenario which is probably not lazy recur because I'm sure the HSE will object, but if you had a big zone in his own or even a middle zone whatever, going over the whole of Immingham and this could restrict

### 1:30:13

further development in Immingham or indeed any area in which has a substance hazardous installation is located. So we need to be aware of of that and the applicant is clearly well versed in that and is keen to do the same. So

### 1:30:31

now with the current application again which is a commonality is that the HSC have come back to us as the NHS A and said they haven't been able to assess the House of this constant application yet

### 1:30:48

and they because of the specialist nature of it and they need to get it to their specialist teams again to a degree that is not unusual

### 1:30:57

but their latest response being the 22nd of March, I think they're staying there, they need another 26 weeks. So what would happen through a normal consultation would that HSE would advise of those zones. So as it has this substance authority A, we know if it's safe to grant consent. But B were we're aware of the implications of granting that consent? Because conceivably you could have a situation where a tiny patch of land use planning, where it has substance consent

## 1:31:29

know raised an objection necessarily. But there zones are such that we as a house is a substantial as the local authority we may feel the sterilisation of land is such that we wouldn't want to grant that hazardous substance consent. Hence the reason why it went back to being over to a planning authority, being a relevant HSA.

#### 1:31:51

So really that's where we've raised that as an issue to to basically know what the ramifications of those relevant zones will be and those discussions have been ongoing and are carrying on.

### 1:32:07

We are comforted that we are hopefully to kind of have some analysis provided to us and to give us indications of those zones.

# 1:32:20

So really that that's kind of in a nutshell. Do you have the other issue that we need to be mindful of is that

### 1:32:28

not only our installations they're subject to the hazardous substance concern, but pipelines can be hazardous pipelines themselves and they can have large zones, they're not subject necessary to

## 1:32:37

has a substance consent themselves. But the actual pipeline can be a hazardous pipeline and indeed and they can have large zones around them as well. So we need to be in the rounds of consideration confirmation and clarity under nature pipeline whether that be hazardous and then like I say there's owns themselves. So we know the ramifications of that.

## 1:33:03

So I think Sir that

## 1:33:06

that's right. Are you able to give us an indication in terms of

# 1:33:10

what the radius of these different zones are

### 1:33:16

that they can vary, they can vary massively. You know, we can have it in zones of

### 1:33:23

sort of 20 metres. We can't. There's one of our largest sounds which is now been

#### 1.33.30

because the problem was purged and put out of use was an acrylic Knight Acrylonitrile pipeline that went from Immingham Docks, Immingham storage, some storage to Blue Star Fibres on Moody Lane and that had 500 metres ±1 attached to it, so half a kilometre. So it depends clearly on the products that's in there, the the, the outer zones and the OR the middle of the outer zones can go hundreds of metres

### 1:34:03

further than that and depending on the the nature of the operation. So

### 1:34:10

there's Tronox which is a chlorine uses chlorine in their pigment for paints further down and that's got a large zone around it because the nature of the product, it can come down to smaller ones that aren't necessarily designated size but have hazardous substance consent where they're just stall gas, gas comic containers of Calor gas and they'll have a small smaller zone, they'll just go across the street.

## 1:34:34

So it's all down to the clearly the nature of the product and those zones and the and the the zones can vary as well. So the inners can be quite tight, but then the middle can go quite wide and then you only got a small difference between the outer which again is to do with the risk assessment in terms of the with the product. But they they could have effect. If you take this, you take the analogy of this site and I'm not saying for any, not saying that this would do that, but you could have an installation that

### 1:35:07

go over half of Immingham, you know if it was obviously product, not saying this will,

### 1:35:14

hopefully it won't, but that could be the implication especially when the edge of a edge of an an area ammonia, no ammonia nitrate storage. We had someone on Grimsby Docks that went into quite a part where you're into Grimsby again that was reduced down in size for partial revocation. Then we've had total revocations there. So the country can spread quite away.

## 1:35:39

I know you mentioned, I think you wait for the HC to respond back to you and it's like they may take up to 26 weeks which would take us out the examination. So in terms of there's already existing regimes in around the area,

## 1:35:54

do you foresee

### 1:35:56

these zones changing

### 1:36:00

significantly from what they are at the moment?

#### 1.36.04

I think so that that's the nature of what we need to be comforted on, that's the nuts of it early. So we need to be comforted that there won't be. I mean like I say, aiming is used to zones, there's only limited dots now and there's industry uses around there. The issue is how, you know, defining what the zone is around this. So we're comforted that it's not going to cause sterilisation or blight for want of a better, a better term like you say dealing with the applicants thus far.

### 1:36:35

We we're hopefully going to get to that position that we'll know that and clearly it won't be the definitive position of the NHS because that will only become out of the consultation on the other, this substance consent application

### 1:36:49

I suppose in some ways and they'll maybe be said by the the party across the room is that that subject to the separate process. So again being very simplistic about it,

#### 1:37:01

you could write planning permission for an installation subject to the hazardous consent and then if the hazardous substance consent isn't approved, well clearly I wouldn't afford the developer would do it because they wouldn't have the relevant hazardous substance consent.

### 1:37:16

So and and as as mentioned before and that's on the basis that has different regimes that control uses and and all the rest of it.

### 1:37:25

I think the slight difference here is that you know hazardous substance consent and and the rest of it he's enshrined in the planning process and the planning authorities, the hazards and substance authority. When we deal with industrial developments that require hazardous substance consent, we always like to have that comfort that we know what we're dealing with in terms of where the zones will end up.

### 1:37:48

And I think that's a reasonable ask and a reasonable position to be in the realms of considerations of a proposal and development. And we ask for that that comfort and assessment and and basically they start that analogy that we're using here with with, with the developers at the moment is under getting that understanding.

## 1:38:11

Thank you. I believe Mr Page has a question.

### 1:38:15

Yeah. Thank you for that. I'm. I'm just curious, would there be a cumulative effect on the size of the zone? So if there's a lot of zones in close proximity, would the zones be bigger?

#### 1:38:26

Apologies, but the zones be bigger on the basis of proximity or would they just all be set independently of each other?

### 1:38:37

Martin Dixon, Northeastern Council I don't think I'm technically advised to to say that one. I I have probably knowledge it's been around the block a while with humour these, but not to that degree. And we we, we consult with the HSC, they tell us what their zone is. We go with that.

### 1:38:59

Thank you, Mr Dixon. The applicant like to respond to what we've just said, Sir, Yes, Harry would fill part on behalf of the applicant and I'm going to ask Mr Robson to explain what the applicant is doing, what their products is doing is they're obviously the operator of the facility in terms of the work that's being done to inform the discussions with Nell and where that's reached. And you'll recall I mentioned in the believe it was in the compulsory acquisition

### 1:39:32

hearing that we'll be providing you and your colleagues with a summary version of the Dexcom report. And that's one of the things I think that Mister Robson will talk about. Now

# 1:39:48

Time and Robson Hair Products speaking for the applicant,

### 1:39:53

yes, as is, it's just been outlined. The hazardous substances consent application was submitted in March. But at this time, the extent of the consultation zones that come out of that have not been documented by the HSE.

### 1:40:11

So as we've outlined before in order to inform the consideration of these issues in the interim Air Products engaged gets gone who we previously explained there were leading specialist process safety consultant to do a number of things. The the first was to develop a representative land use plan planning assessment model based on the HSE guidance and based on the design information which was included in the hazardous substances

## 1:40:43

been sent application, supplemented by latest available design information from Air Products. We then asked them to use that model in conjunction with the HSE's published thresholds to estimate the inner, Middle and Outer consultation zones

## 1:41:02

and then to use those estimated consultant consultation zones to evaluate the impact on the

surrounding land areas, the residential areas, the buildings areas of public use, but also transport routes, recreation areas and land intended for future development,

### 1:41:27

and to evaluate that against the published HSBC decision making criteria. And then we asked them to conclude based on the HSE published criteria, whether it's likely that the HSC would advise against the proposal in any areas and also to identify whether the project would affect potential future development sites

### 1:41:55

at having regard to the allocation of sites contained both within the Nelk Local Plan and also the emerging local plan. So as part of that assessment, we ask them to consider their estimated consult consultation zones against the Nelk Local Plan 2013 to 2032,

### 1:42:16

the Nelk Local Plan Review Draught Plan with options 20th of December 23,

# 1:42:23

existing extent planning permissions excluding any that were merely adjustments to existing facilities planning applications under consideration and existing land uses.

#### 1:42:38

And there's been quite accurately pointed out these are the actual zones will ultimately be calculated by HMRC. And so this work by Dexcom can only be considered as a proxy for for what the HSC will ultimately deliver. But to ensure that the calculated zones are as representative as possible, gets going to arrange meetings with the HSE to understand their approach.

### 1:43:10

And additionally a Freedom of Information request resulted in the HSC sharing their guidance documentation on land use planning zones. So from the applicant's point of view, we're reasonably confident that the work by Dexcom is as far as possible an accurate representation of what ultimately the HSC will conclude. But it's not the formal HSE document. So the the general scope of the

### 1:43:41

Land Use Planning Assessment included the full project

### 1:43:46

from the jetty all the way through to the road tanker loading and it included all phases of the project.

### 1:43:55

As we've noted before in IS H5 we committed to providing a summarised version of that gets on report

## 1:44:06

at deadline three and that report

1:44:11

whilst not giving the full zones due to confidentiality reasons, but it will indicate for each land area around the facility, the likely zone that that piece of land would sit in.

1:44:32

Air Products have

1:44:34

have discussed the work done by Exxon with Nelk and we've explained the expected hazardous substances consent zones overlaid on the local plan and we will shortly share a copy of that summarised gets on report

1:44:56

4 Milk review.

1:45:01

But based on that, it's it's the applicant's understanding that based on these zones that there would not be any impact on adjacent land uses including allocations for future development.

1:45:16

But this needs to be confirmed with NELK following both your review of the Dexcom report, which we will share with you and we

1:45:31

we will continue to have discussions on on this matter in the coming weeks.

1:45:36

1:45:38

In in in parallel,

1:45:41

Air Products are continuing to engage with the HSC

1:45:46

to try as best we can to expedite completion of the hazardous substances consent application and the formal issue of those consultation zones.

1.45.58

But as was noted, this is not expected before the end of the examination phase.

1:46:05

Thank you, Mr Robson, in terms of incorporating A contingency factor. So I understand that you've used the HMRC guidance that's been published to estimate the zones as such

1:46:17

and on that basis you've stated what's properties that you'll acquire team to compulsory acquisition

and so on. Have you applied a contingency factor for you just in case the zone that they won the HDR finalise, their assessment is larger than what you've estimated and that

1:46:35

doesn't include more properties or

1:46:39

other areas. You know coming into the inner zone that you currently assume will be

1:46:47

Tom and Robson for the applicant,

1:46:51

no. We we haven't in our consideration applied any contingency to the zones estimated by Hexagon, partly because we have no sort of evidence or or basis on which to do that. But partly also because

1:47:16

we wouldn't expect any significant difference in the zones and there are very few residential houses in the vicinity apart from Queens Rd

1:47:33

that would possibly be fall into an inner zone by any sort of

1:47:38

increase that may come from the final HSC published zones.

1:47:47

Thank you Mr Robson. Any further questions from members of the panel?

1:47:54

So that brings a close to sort. Before I bring it to a close, are there any further questions?

1:48:00

Mr Dixon,

1:48:03

Martin Dixon, NE Lincoln Council. No, It's more of a nuance really than anything else. It's just distressed him. You know important I know this has been covered before in terms of the compulsory acquisition of the residential properties that are being may be affected by the zone. So it's just the stress, the importance of that, that consideration. And also probably my nuance point is that any legacy buildings that may have a A, A use, particularly classy use and any permitted development

1:48:33

that may pertain to those in terms of future residential use under the permitted development regime. So that would be something that would want to assess once we got the assessment of that Clearview, what's in the inner zones, etcetera. So it's just that nuance point, but I suspect quite an important point. Thank you,

## 1:48:54

Sticks. And any final comments from the applicant, Sir Harwood for pot on behalf of the applicant, no thank you. So we we, as you've heard discussions are ongoing. They can pick up any queries such as the one that's just been raised and rather than deal with that now let's see how those discussions go.

## 1:49:13

Thank you. So that concludes agenda. Item four, I will Nando now hand over to Mr. Hunter.

## 1:49:19

Thank you, Mr Sheikh. And I'm conscious of the time. I think this may be sort of a good time for sort of take a break and for us to review our actions as well. And So what I suggest is we perhaps sort of combine our review of the actions with our sort of refreshment break and perhaps sort of take half an hour and sort of come back at 12:20. So there's hearings adjourned till 12/20. Thank you.