

Hearing Transcript

Project:	H2 Teesside
Hearing:	Recording of Issue Specific Hearing 3 (ISH3) - Part 2
Date:	14 January 2025

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TRANSCRIPT_H2TEESSIDE_ISH3_SESSION 2 14012025

00:04

Welcome back. Apologies for that short adjournment. I had an issue here which I needed to resolve, and that has been sorted. But I do apologize for having to briefly break away from the meeting. So I'm resuming this meeting into the issue specific hearing three on environmental matters. Can you just confirm that the visual and audio recordings are still taking place? Please?

00:36

Yes. Thank

00:37

you very much. Okay, in that case, I'm going to move on to Agenda Item three, which change request as relevant to issue specific hearing one, and in accordance with regulation 14, two of the infrastructure planning compulsory acquisition regulations 2010 the examining authority would now give an opportunity for any additional interested parties or any additional affected persons as a result of the accepted change request submitted by the applicant to amend its development consent order application to make oral representations on the matters previously discussed, the issue specific hearing, one which related to the scope of the development including its relationship to the extent of the order limits and the progress of development design. Are there any additional interested parties or additional affected persons present who wish to make oral representations on the matters previously discussed at issue specific hearing one, I'm getting no indication, and I'm going to move forward. So that concludes this section, and I'm going to move on to Agenda Item four, which is the details, details and the impacts of the change request accepted into the examination. Please, could the applicant explain the substantive changes to the design approaches set out within the change request accepted into the examination, and whether these could potentially lead to further changes in design. So that's my question to the applicant, please.

02:16

Thank you, sir. Harry wood, Philpott Casey, on behalf of the applicants, the change request does not involve any substantive changes to the applicant's design approach. As the change request report that CR one, zero, 44 explains, and as we touched on yesterday in the compulsory acquisition hearing, the changes fall within four categories. Category A relates to engineering and design development. Category B is changes to construction approach. Category C involves reductions in the order limits, which are principalism as a result of engagement with affected persons. And Category D relates to an increase in the order limit to enable the applicant to utilize an existing natural gas pipeline, the national gas pipeline, to import natural gas to the main site. The Category A changes that relate to engineering and design development are changes 157, and nine. They involve the addition of a second flare stack for phase two of the highest gym production facility. That's change one, the removal of an air

separation unit from phase one of the hydrogen production facility. Change five. Updates to building dimensions at the main site. Change seven, and the removal of an AGI within work number 2b which is change nine, change one. That's the second flare stack that's arisen as a result of further engineering studies. It will be designed within the same maximum parameters as the Phase One flare those presented in Table four, one of factor four of the environmental statement. And in summary, it will have a maximum height of 108 meters, AOD, minimum height, 73 meters, AOD maximum platform diameter of four meters, and a maximum flare stack diameter of one meter, and change five the removal of the air separation unit that's arisen as a result of commercial discussions about the oxygen and nitrogen supply for The hydrogen production facility. And oxygen and nitrogen will now be sourced from a nearby supplier, which removes a requirement for an on site air separation unit and on site liquid storage. Change seven updates to building dimensions has arisen as a result of further engineering and technical elements to specific element for the development maximum building height is increasing 48 meters above ground level, 51 meters above ground level, the maximum height of the flash vessels has increased from 58 meters AOD to 73 meters AOD, and then change nine. That's the removal of the AGI from the work area. To be that's made as a result of further engineering interface discussions with relevant stakeholders, including Anglo American and ex ante power. Now none of those changes represent substantive changes to the design approach, and as the applicant has explained, for example, in response to the first round written questions. Question one, point 11.1, that's rep two, zero, 19. Technical engineering and design work is ongoing, and as further technical and engineering information has become available, the applicant has reflected this by making changes to the application. But the need for flexibility over final detailed design remains is set out in the application document. So see, for example, Section five, the design and access statement. That's a PP zero 34 and is suitably controlled, as we've explained through the draft development consent order, including through requirement three, which we're going to come back to under a later item in the agenda. Is not envisaged that the changes that are brought forward in the change request will themselves lead to consequential further changes we discussed yesterday, some other changes which might come forward, but not as a result of what's in the change request. So that was all I was going to say by a reference to that agenda item. Thank

06:23

you very much. That's fine. Can I ask if any interested parties wish to respond to the applicant's explanation of the change request? Please? Getting no indication. So we're going to move on to Agenda Item five, which is the starts with the main amount of questions that we've got, and that's going to be taken forward by Miss Bennet Matthews, please.

06:52

Thank you, Mr. Butler. Before I move on to the next agenda item, items, Natural England has notified the examination authority of their deadline, five a response, which is rep five a zero 15, that they are unable to attend this issue specific hearing, but that they have provided a number of comments questions on agenda items five and six. Going forward, I will refer to National Natural England's rep, five a zero 15 as their deadline. Five a submission. Just for ease of reference, the examination authority fully appreciates that the applicants and relevant interested parties may not at this stage have had the opportunity to fully consider the comments questions raised by Natural England in their deadline, five A's submission, but have at least read those submissions. However, what I'm keen to do is establish as

part of this issue, specific hearing into environmental matters and updates on the current position in respect to the key issues which have been raised by Natural England, and the extent to which these issues have been either agreed by Natural England and the applicant or remain outstanding between the parties and any other interested parties, if applicable. I appreciate that there might be matters raised by Natural England in a deadline five a submission which cannot be addressed today by oral submissions, and therefore may need to be brought forward to a future deadline in writing. So the way in which I propose to deal with natural England's deadline five a submission in respect of items five and six is that I will make reference to the original agenda items as originally drafted. I will then subsequently refer to natural England's deadlines Firebase submission in respect of that particular agenda item. Can I ask the applicant? Oh, sorry, I will then ask the applicant to provide the response to the agenda item and the additional comments, if possible, raised by Natural England in their deadline a submission, I propose that it is at that stage when I ask the applicant or interested parties to provide a response that we can discuss whether the applicant is in a position To provide a response all these she would take, should be taken forward and responded to in writing, which, given the advanced stage of this examination, with six weeks remaining, I would propose that that the deadline, six, eight, which is the 22nd of January, 2025 please also indicate how you wish to deal with the agenda item. So it's quite lengthy some of them so dealing with the original question first and then any deadlines via submissions on that point or both aspects together at the same time. Do. Um, I should clarify that the for those in attendance that the National England deadline, a submission can be found in the examination Library Reference, as I stated, rep five, a Sura 15. And although I will make reference to the national England submissions and go through these in order, it would be helpful if you have this document open before you, so that you can make reference to each item. So before I move on to deal with agenda item five and six and the other items can ask whether the applicant has any comments or questions on the the approach which I've proposed, or agenda items, five and six.

10:42

Harry wood, Phil Park Casey, on behalf of the applicants. Madam, no, that that's clear. The only thing I would say, by way of caveat, is that there are some items, as you'll hear as you're going through the agenda where the applicants experts are working on substantive matters that have been raised by Natural England, where it's likely that the response may be provided at deadline seven rather than six A because of the volume of work that has been requested, where that's the case, will will seek to make that clear, but in terms of the general approach, no, we're content with that. Thank you.

11:19

Okay, thank you so much. Mr. Philpot, can I ask whether the any of the interested parties have any comments or questions on the approach that I'm seeking to adopt? I can see no indication of hands, so I will move on to deal with agenda items five to nine, turning first to Agenda Item five, air quality and omissions, dealing with bullet point one of the agenda item first as set out, which is, please, can the applicant explain its approach to the assessment of ammonia emissions dispositions From vehicles in regards to the impact on the treatment in Cleveland, special protection area and site of special scientific interest, with reference to natural England's relevant representations are zero, 26 which are representations rep two, zero, 72 and natural England's deadline for submission, rep for zero 28 under national England, Natural England. Sorry, as we apologize. I keep saying national England, Natural England. Key issues 10, matter one and Natural England. Key issue 28

12:42

I thank you. Harry wood, Philpott, sorry, I do apologize. I thought you'd

12:46

finish. No. Sorry, I'm gonna, what I'm gonna do, bit lengthy, is I'm gonna draw your attention to the deadline five a submission, if that's okay, and the points that I really want to draw out from that as well. So I'll just go through that, if that's okay, and then you can determine whether you want to deal with this as one complete issue, or you want to deal with them in two parts. I am reading it out. You should have access to the deadline five a submission. I will go through it. But if there is any points that you you miss as I'm going through it, please just highlight and I'll try and go over that again so

13:26

we have access to it, so we're content that you don't need to repeat it. We'll be looking at the document as requested alongside,

13:36

okay? So therefore, what I'll do is I'll just draw attention to the applicants, Alex, one of and I refer to them as any Natural England. I refer to that that party is any deadline. Five, a submission starting at issue ne 10, where they say that the applicant is yet to sorry, but where they said that they any are yet to complete a review of the applicants. Rep zero, 34 that's the technical note to do with traffic, traffic cumulative assessments, and they intend to do so by deadline. Six a they then move on to any 28 they then move on to any 28 and they point out that the the technical note assessment serves the SSI in terms of location, irrespective of protected sites. But what I would ask the applicant to do is in responding to this question raised by any to clarify whether or not an updated narrative on the implications for the triple si habitat, specifically coastal dunes and grasslands, has been prepared, and if so, the applicant. Identify where that can be found. And in respect of any 28 given the late stage, any of given the late stage of stage of the examination and challenges associated with it, in amending the environmental statement that the report on the implications of the teas, teas method, Cleveland coasts at triple si may offer a more focused point focus approach. So can the applicants explain whether it be in a position to provide such a report.

15:41

Thank you, Madam, I'm going to do apologize. I thought you'd finished.

15:47

No, that's fine. Okay. So there is another point, sorry. I just wanted to get together. Matthew, sorry, another point. So I do apologize, but I just wish to make and you may wish you to take notes at this point that I'm going to make because it's not expressly covered in the deadline five a submission under any 28 the the ESA, the examining authority, does note that any that any remains concerned, that ammonia and acid emissions have not been modeled, And the fact that any have advised without this information, it is not possible to conclude there will be no adverse effects on the integrity of the teeth of Cleveland post SBA runs up, can applicants explain and including its response to this agenda item? Can the applicants explain and include a response to this agenda item? Additionally, what is being

done to satisfaction resolve Elise concerns relating to ammonia acid emissions not having been modeled and it suffice that without this information, it is not possible to conclude that there will be no adverse effects on the integrity of the teesmith and Cleveland because SBA and Ramsar. So that concludes the question,

17:12

thank you, Madam. Very good thought. But on behalf of the applicant, I'm going to invite Dr Miley, who's a technical director and the HRA and air quality need at AECOM to respond to those matters. Thank you.

17:27

Thank you. Good morning, madam. Dr James Riley from AECOM, on behalf of the applicant, I'll deal with the point about acid deposition and ammonia first. So the deadline five report to inform HRA does include discussion of ammonia and acid deposition throughout it. So it may well be that natural and simply haven't at this stage had the opportunity to review that. In fact, they have said, I think that they haven't had the opportunity to review that. So, for example, the impacts of traffic related, let's stick with traffic to begin with, since that was actually the question that you posed. With regard to traffic modeling, the impacts on traffic modeling are covered in paragraphs, four point 2.88 to four point 2.90 with regard to likely significant effects. And in paragraph six, point 6.1 to 6.6 point 12, with regard to the appropriate assessment of the HRA. And that covers all pollutants, including acid deposition and ammonia and the the technical modeling note, which is rep five, so sorry, it is the technical note, updates to air quality and traffic cumulative assessments. Document six, point 4.42, that was which is also document rep 5034, that was submitted at deadline. Five presents all the raw data, which I think they have acknowledged in their in their comments. So my view is that when they have reviewed our updated report by the 22nd they will note that it does contain discussion of ammonia and acid deposition from vehicles and from Point Source emissions. There are tables, if I just have a quick look, there are tables specifically in the HRA report that that deal with that. So bear with me for a second while I just bring up an appropriate reference.

19:42

So for example, table 4.8 in the HRA discusses oxides of nitrogen. Table 4.9 also discusses oxides of nitrogen. 24 hour, which is another one. Table four point 10 discusses ammonia and table four point 11 discusses nitrogen deposition, which we've been talking about before. Four and table four point 12 presents the data for acid deposition. So I can confirm that all that information is there and is available in the documentation that has been submitted for Natural England review. So I don't anticipate that, having reviewed that and got back to us by the 22nd which is what they've said in their note, there should be anything further with regard to that outstanding information there, and then going back to there, so I think that deals with the point about acid deposition and ammonia, unless you have any further questions on that matter. So then looking back to their five a sorry,

20:37

no, that's fine. Thank you. Thank you very much for summarizing that position, what's good, and

then going back to their note, with regard to any 10 they've obviously said they will review the reports content. So that's the technical appendix that I mentioned, where all the raw data is presented, which includes acid deposition and ammonia deposition from traffic that is present from other sources, as I say in all of our documentation. And that's in combination as well, not just from our project. And they've said they will review that and provide further feedback by by the 22nd deadline, six A and then with regard to any 28 this, yes, this is the point, with regard to the data, with regard to the triple si so again, for clarity, there is no data with regard to the Triple S i that has not been presented in the documentation that has been submitted for deadline five or previously. So document reference, six point 4.42, the technical note, update to air quality and traffic cumulative assessment and six point 2.23, the chapter es. Volume One, chapter 23, cumulative and combined effects. So the summary chapter for that which has been updated to deal with the latest cumulative effects assessment as submitted to DF five, they present all the updated modeling is relevant to the triple si only the cumulative effects assessment has changed because everything else is the same as it was the change report I, the impacts of H 2t side itself have not changed on the Triple S. I from the change report, whatever deadline that that was, I forget now four. Was it the contribution of H 2t side to air quality impacts on the Tasman, Cleveland, coast. Triple SI is therefore, as it was presented in yes document, reference 7.4, the change application report, appendices, and moreover, since the SBA and the Triple S I have the same boundary as I think naturally we've noted. The model results regarding effects on the triple si are the same for the closest part of the SBA, COVID Dunes, as they are for the triple Si. So the data is all there and has been presented in the HRA and the applicant ecological interpretation of those results, specifically with regard to the triple si has therefore not differed from that provided in three, a point two, point 16 and three, 8.2 point 19 of the change application report. So that that's that's the background, just to make it clear that there is no new data that has not been submitted. With that in mind, it is therefore possible, and we will pull that together into a note for the purposes of natural England's reference, because it's all existing data that's in there. So we can quickly pull that all together. That said, since they are going to give us further comments at deadline six, a I would suggest we submit that at deadline seven, because we can then pick up then further comments they may make at that

23:26

point. Okay, thank you.

23:31

Does that address everything you want to cover on that particular point?

23:36

Yes, I think it does.

23:41

Madam Heywood, Philpott Casey, on behalf of the applicant, just before we go on to the next sub item on the agenda, I should make clear in case it assists in terms of the handling of the hearing from here on in that we have generally considered and built in responses to the material that's been put in, most recently, on behalf of Natural England. So but for all the responses you'll hear, where appropriate, we identify and address matters that have been raised in natural as most recent better. So if that assists going forward, you should assume that that will be done.

24:21

Thank you, missus. That will assist, and actually that will assist with the time as well, just in terms of Mr. O'Reilly's response, I just want to ask whether any interested parties have any comments in relation to the response that we just had from the applicants, I'm seeing no indication of hands. I just want to check with my fellow panel members whether they have any comments or additional questions that they think that they might want to ask. I. I'm getting no indication of hand, so if that's that's absolutely fine. Mr. Riley, oh, sorry. Mr. Butler, no, I

25:07

was just going to say no, that there aren't. And indeed, what we'll do is, if we do have further questions, we'll put our cameras on. If we want to interject at any point, so you don't need to ask us again, we'll just, will put our cameras on.

25.21

Okay, thank you for that. Mr. Butler, thank you for making that clear. Okay, moving on to the next issue. The Mr. Riley, I'm not sure whether you're dealing with this next issue or Mr. Philpott, could you clarify?

25:38

Yes, madam, I apologize under for the next issue, which concerns the closed loop system. What we thought might be helpful on this. We've got two people to speak. The first is going to be Mr. Ross Nixon from BP, from whom you've heard before, he's environmental and social manager of BP, to explain the closed loop system. In doing so, it's likely that he's also going to be picking up and dealing with some matters that arise later in relation to the same, same issue, but we thought it might be helpful to explain the system before then, I ask for Dr Gary Gray to deal with the assessment matters. So Dr gray is a technical director at ACOM. Now, so far as Mr. Nixon's explanation is concerned, we have prepared a simple diagram, which is not currently before the examination, but if you're content, we were proposing to put that, share that on the screen for the purposes of Mr. Nixon's explanation of the system, and then to submit that as an appendix to the summary of all representations, it just might help in terms of following the explanation to have that simple diagram up on the screen.

27:12

Yes, Mr. Philpot, I think that that would be very helpful. Thank you very much. Can I just just for other members here at the hearing, I should say that we're now on bullet point two of agenda item two, and lifted to the applicant to provide a detailed explanation of how to assess the concerns of Natural England in zero 26 rep 072, and deadline for submission. Rep zero, 28 in relation to the positive carbon capture process treatment of our minds, emissions, including handling and maintenance of any phases and unclaimed events. And that's also been raised in the natural England's deadline Firebase submission in relation to the closed loop system. That's just for clarity for anybody in the hearing. Thank you. To you. Over to you, Mr.

Fauci, thank you, Madam. And just to complete what I was explaining that the later item where this may well this explanation may well help in addressing item seven one as well. But of course, we'll there'll be an opportunity to come back to us if need be there. So I hand over to Mr. Nixon,

28:28

Good morning, madam Ross Nixon, on behalf of the applicant. And so fundamentally, it's worth considering that the process is a pre combustion carbon capture process. And at a high level, the process comprises a number of steps, as you can see on the screen there, the first step is purification and preheating of the natural gas feedstock. The second step is reforming of the natural gas through the addition of heat, steam and oxygen to produce what's referred to as syngas, which is a mixture of hydrogen and carbon The third step is removal of the CO two from the syngas stream using amine based carbon capture, using an amine based carbon capture process. And the fourth step is, is compression and purification of both the hydrogen and carbon dioxide streams for onward transmission. But it's worth noting, this is a fundamentally different process to a post combustion that's submitted to atmosphere, and in this pre combustion process, there's no planned exhaust gas

29:41

output.

29:45

Sorry, Mr. Nixon, we seem to be having problems with your connection, and I think we've lost probably about the last 20 seconds of what you said. Otherwise you can repeat that at all.

29:57

Okay, yes, so. Certainly from Did you? Did you hear my explanation of the four steps in the process? Madam,

30:07

I think I did. Yeah. Okay, okay,

30:09

then let me. Let me start at the next part. So it's a fundamentally different process to a post combustion carbon capture process, where the carbon is captured from an exhaust gas stream that's submitted to the atmosphere in a pre combustion process, there's no planned exhaust gas output during normal operations. As you can see on the screen, there the two main outputs in the process, which are carbon dioxide and hydrogen, and both of these are contained so a similar process has been used to generate hydrogen for many years, with the resultant CO two being emitted to atmosphere, what's known as gray hydrogen, and it's known to generate a pure hydrogen stream that's required for industrial uses, so meaning that the majority of CO two has been effectively separated out to produce that pure hydrogen. And the only difference in the process here is that, rather than being emitted directly to the atmosphere, the resultant CO two stream will be captured and compressed for onward transport and storage. So the applicant are confident that it can achieve levels of purity of the hydrogen, meaning removal of CO two from the hydrogen of well below 5% CO two content. So there are two main sources of CO two emissions during normal operations, the small con small residual quantities of natural gas and the

hydrogen that's sent on to consumers. And you can see on the figure there where it says, h2, tail gas for plant usage, the small quantities of residual natural gas in that hydrogen that is then recycled back to the start of the process and used to generate heat for the process. And that's the those are the emissions shown on the top left of the diagram. So under normal operations, those are the, the only CO two emissions to atmosphere effectively. And I hope that, I hope that helps in in kind of just general understanding of of the process and the difference between a pre combustion of post combustion carbon capture process.

32:29

Yes, that does. Thank you very much. There's only one question that I I have to ask Mr. Mr. Ross, you state that the applicant is confident that you can achieve the removal of hydrogen well below 5% CO two content. Can you, can you just explain on what, what basis that assumption has been made?

32:51

Essentially, I mean essentially that that is what is achieved in existing processes are already operated elsewhere, but it's also required to produce the pure hydrogen that is then needed for use by industry across seaside.

33:09

So is that, is there an evidential basis for that, or is it just based on kind of common practice, you know, in different in the different industries?

33:18

Yeah, absolutely. So I think, I think in one of our earlier submissions, I would have to look up the reference for that we have referred to. You know that the existing generation of hydrogen in existing industrial processes elsewhere, so that would be the evidence is listed there. I don't have it in front of me at the moment. It's as 04040,

33:48

okay. Thank you very much. That's, that's, that's really helpful explanation. Can I just the diagram is very helpful, but it we do need it to be formally submitted into the the examination. Could I ask the applicant, Mr. Philpot, whether it is possible to submit the diagram at deadline six a

34:21

madam, yes. Harry Thompson, on behalf of the applicant, we'd anticipated putting that in at six a as an appendix to the summary of our oral submissions. So it's obviously already in existence, and there's no difficulty in doing that.

34:38

Okay, thank you so much. Thank you. And

34:41

then madam, after the contribution that Mr. Nixon has provided, I was going to ask Dr gray to deal with the points that Natural England have raised in the context of that explanation of the process.

34:56

Thank you. I'm getting ahead of myself. Thank you so much for reminding me about that. Thank you.

35:03

Dr Gary Gray, technical director ACOM, on behalf of the applicant. So I represent my role in the project to date has been to quantify the impacts of emissions to air, for the environmental statement, for the HRA and for permit application. So I'm familiar with the sources and the pathways. So if we look back to the issue Natural England raised, which related to emissions of amines, specifically from the closed loop diagram, their concern was that they had underrepresented we had underrepresented emission sources, and so they were looking for clarification as to what the sources were. So, as Nixon's already explained, we from the diagram, we have a circle, or a circular process in the middle, in which amines are used and then recharged and reused. And there is possibility that a small amount of amine could be carried towards the flares in the event of a system closure or they during startup. And the process we have includes a mechanism by which those amine molecules can be captured prior to reaching the flare, and in the event that any individual molecules did actually make it as far as the flare, they would then be combusted so there would not be an emission of amine via that route. So the sorry, just barely one second. So, yeah, so we kind of providing the diagram for six A was the accompanying text that provides the details about the aiming emissions within there, so the emissions to air will be controlled by the Environment Agency via the environmental permit. Environmental permit which will which currently exists as duly made status, which means that the agency considers that they have the information on all the sources that they require. However, to provide further reassurance on this point, there was a permit granted by the Environment Agency for the proposed high net hydrogen production plant, which is reference EPR, FP, 3130 9f. N, stroke vo on three, which did not require assessment or monitoring of any amine emissions, and it does not set any emissions limit values for the amine emissions, as it was recognized that none could occur from the hydrogen production process, and that process is the same as we're proposing for this site in the letter to the examiner on Eighth, January, 2025 any has confirmed that it will review the further information submitted by the applicant in any further comments for d6 A, we all continue to engage with Natural England to seek and resolve any outstanding concerns they may have, and to remain, we remain confident that the issue is capable of resolution.

38:32

Okay. Dr graves, is that complete? Your your response?

38:38

I think it does. At this point, I'll, I'll address some following on points off, after you've raised moved on to those questions.

38:45

Okay. Thank you very much for that. Thank you,

madam. Harry wood Philpot, on behalf of the applicant, in light of the reference to the high net hydrogen production plant permit, we will take an action point to submit that also into the examination at deadline six A as another appendix to our written submission. So I don't think, I think there's a that's currently before the examination.

39:15

No, I don't believe it is. And thank you. You preempted the question that I was going to ask as to whether that permit could be, whether you could submit a session point that permit into the formally, into the examination. So thank you very much for that. If that could please all the responses Mr. Philpott in relation to this, on behalf of the applicant item, or do you have any other

39:42

No, madam, that's what we want to say on this item. I was just simply going to say that Dr gray will also be dealing with the next item. So I'm going to come off screen for now. I'll come back on if I can assist in due course, but I'll leave you in Dr Gray's capable hands.

39:57

Okay, before we move on to the. Next item, I just want to ask whether any interested parties have any comments or representations with respect to the response that we've had from the applicant. I'm getting no indications of hands. So if we can move on to the next item agenda, just opening one second, I'm so sorry. Just need to that's absolutely fine. So if we move on to the next item on the agenda, which is turning now to bullet point three, agenda, Item five, and this specifically states request that the applicant explain the controls and the measures to be implemented for the voting of emergency emissions during maintenance, with reference To any relevant representation. Zero, 26, original representation. Rep 2072, that is deadline for submission. Rep, four, zero, 28, under any key issue, any 12, I would actually note that there are no comments or questions from any at its deadline. Five, a submissions that I wish to refer to the applicants that I wish to refer some of the applicants attention to on this item. So over to you. Dr Gray, thank you for your response, behalf of the applicant.

41:34

Yeah. On Off.

41:42

Well, sorry, can you hear me at all? Yes,

41:49

I can hear you. Yeah.

41:51

That was a worrying moment. A written response to any 12 was provided at deadline five and response to question two, point 3.4, just reps.

Again, sorry. Dr Gray, we appear to have lost connection, though. Sorry. You were saying that a response had been provided, and then you referred to a deadline. So if you could just reference that that be useful, because I think you lost

42:21

connection there. So yeah. Written response to any 12 is provided at the I5 and response to question two, point 3.4, which is reps 041, in that response, we provided a simple description of the controls and measures set out with subheadings. Key point for consideration from that description is that any potential impacts on designated ecology sites are the amines are not released to air from the process during normal operation, and any abnormal releases are not, shouldn't, couldn't reach the flare, as there was a mechanism for their removal and feeding back into the process, and if they do reach the flare, then they would be combusted. So in order to prevent emissions to air from the flare, those primarily in this context, be emissions of NOx that is used is to use flaring only for safety reasons, and non routine operational conditions such as start up and shut down. The activity of flaring during start up and shut down will be controlled as part of the environmental permit. Environment permit would include a start up and shut down requirements so that the applicant must comply with it's also expected there will be a condition within the permit that requires the production of other than normal operating conditions, or op NOC as a plan. This will include periods of startup and shutdown, and will need to be agreed with the Environment Agency prior to that operation. The quicker summary than the long one we set out at DL five.

44:06

Thank you, and you've made reference to abnormal Reese's. Can you just explain for my benefits? Sorry, as a non technical person, exactly what that is. Sorry,

44:16

certainly. So the normal operation is while the plant is is functioning in the way that it is intended to produce hydrogen. But there are times where you might have to shut the plant down due to maintenance requirements or for servicing. And so while you're while you're shutting it down, and whilst you're running it back up to full operating conditions, those are non non standard conditions.

44:45

Okay? Thank you very much. Thank you for that explanation. I don't have any further questions at this point on that agenda item. So what I'm going to. Do now is I'm going to turn to the interested parties and ask whether there are any comments or questions from any interested parties on the response provided by Dr gray.

45:19

Okay, I don't have any indication of any hands being raised or comments. So I'm going to move on trying to do so, yes. So I'm going to move on to bullet point four of Agenda Item five, which states and listed for the applicants. Can the applicants explain the assessment and approach to waste emissions and the potential impact on protected sites, in particular, minimal waste among and non amine waste or other waste or emissions, having regards to the issues raised by any in its relevant representation, zero 26 and its retinal representation. Rep 2072, and its deadline for submission, rep four, zero 28, and this

is under any key issue, any 12, once again, I should say there are no comments or omissions from any deadlines. Five, a submission that I wish to refer to, that I wish to refer the applicant to, or draw your attention to, on this agenda item. So if I could ask you to provide a response if you're dealing with this agenda item again,

46:48

yeah, myself again, we have sought to address the points raised in deadline, five, response to any 12, again, set out in a longer form of words. In that Spruance, we note that the amines would be contained in a liquid or solid waste, and that it would be contained and then removed from site. The point here being that the being a process, it's designed to enable the material to be removed so the waste do not represent sources of emissions of a needs to air, therefore are not relevant for consideration of impacts at ecological sites for which the only viable pathway from source to receptor is via emissions to air. We await any further comments on this issue from Natural England at d6, a and we'll continue to engage with Natural England to seek and resolve any outstanding concerns they may have on this issue, and we remain confident that it's capable of resolution as we are provided, essentially providing information to assist their understanding of what the process entails.

48:01

Okay, thank you. You said that you'll be referring to national England for further discussions on this issue. Do you have any time scales at all with regards to those further discussions in order to conclude this matter? At the moment or

48:19

so, I'm just referring to a colleague across the table.

48:28

Yeah, we, we have a meeting with them within a couple of weeks time, and but we're, we're at the moment, we expect them to the information we're providing in writing at deadline five to satisfies the concerns that they have.

48:43

Okay, thank you very much for that. Dr Gray, thank you. Do you have anything else to add, any other response to add, or has that completed your response on that agenda? Right? That

48:55

completes my response. Okay, can

48:59

I ask any interested parties whether they wish to make any comments or responses on that agenda item, I'm getting no responses. So therefore I'm going to move on to the next agenda item, which is bullet point five of Agenda Item five, and this is directed to the applicant, Mr. Mr. Philpot, thank you. So I'll just go through the agenda item so firstly, can the applicants explain its approach in relation to any key issues, N, E, 17, nitrogen, disposition, matter one and ne, 18, operational admissions of amines and amine degradation projects matter one and how it is seeking to address the concerns of NE, I'm

going to turn to. To any five a submission documents in relation to this issue, with reference to any 17, as it is in that document where any states that it has updated the report to inform the habitats regulation assessment. Sorry, I apologize, where it states that the updated report to inform the habitats regulation assessment excludes the proposed development from consideration as part of in combination assessment, and they reference the will and judgment any disagrees with this approach, and they say that they'll submit further evidence on this issue by deadline six A, and he goes on to state that that information is to be submitted by the applicant at deadline six, which was yesterday, and then it would provide a further feedback at deadline six A, when it has reviewed this information, I appreciate that the applicant has provided a response, a written response at July six, a on this issue, identified in relation to any 17 however, I would ask the applicant to confirm whether they're in a position to summarize their position on this Point. Although I appreciate that you've you've, you've you've provided a response a deadline six, but it'd be useful to have a summary on your position with regards to this point. Thank you.

51:30

Thank you. Thank you, madam. Harry wood, Philpot, on behalf of the applicant, in a moment, I'm going to turn back to Dr Riley to deal with a substantive point, as you'll have seen from the response that we've put in in writing already, that the reference to the wheeled and judgment we don't think really is determinative. We've identified why we believe it's relevant, but the analysis does not depend on it. At this stage, of course, we await to see what it is that Natural England takes issue with, and obviously we'll have to see and respond to what they say in due course. At the moment, they've given no indication as to the basis for their concerns. But in any event, for reasons, I now ask Dr Riley to go through we don't believe ultimately that matter ought to be determinative one way or the other. So I'll hand over to Dr Riley, if I may. Thank you, Mr. Solpo,

52:36

thank you, Dr James Riley, on behalf of the applicant. So this specific point, with regard to the reference the wheel done, refers to a statement in paragraph 6.7, point 15 of the deadline five HRA, where we basically mention that there is a definition of very small indeed that was established by a case called the wheeled and case for nitrogen deposition, and that if contribution was very small indeed, it could be legitimately excluded for in combination assessment, however, well, no, I'll take a step back. First of all, the contribution of nitrogen deposition that is being discussed in that paragraph is 0.02 kilograms of nitrogen packet per year, which we do consider, would be properly be regarded as very small indeed, in that it's regard, it's equivalent to point two of the critical load, and is therefore an order of magnitude below the threshold for imperceptibility, as defined in guidance, without getting too technical about it, which is 1% of the critical load. It's so small to be very barely visible in the modeling, and is well within the limits of normal variation in average nitrogen deposition rates that is likely to be experienced, so statistical noise when you're down to those kind of small numbers. Now that said, natural reasons, naturally, there's reasons for disagreeing with that point of view have not been expressed, but that's yet. But that said, as Mr. Philpott alluded to, we don't need to rely on reference to that case. And our conclusion is not reliant on that case. And we have made updates to the the HRA, 446, a, I think, which is discusses this, but basically our further justification is as presented to natural, the only location to which that particular text applies is a historic nesting location at South gear. Now, as already discussed in the HRA, there is no evidence of any actual nesting there since 2018 and there

are other issues that have an overriding influence on the potential for re establishing, successful turn nesting there, for example, there's extensive recreational disturbance which is which is very inimical to turn nesting. They require undisturbed locations. And secondly, to re establish, turn nesting in that location, it will be necessary to damage the triple A side dune vegetation that's developed. So there's a tension there between a. Triple si interest features, which is June vegetation in that location, and the wider spa sensitive interest features, which is the turns, and also the nesting Abba sets. And thirdly, and this is the more practical point, if you like, which I think is sort of the ultimate point, as well as the recreational pressure. Is that the turns require, require shingle, bare shingle, in which to nest. Now, an area of shingle was fenced off to try and attract nesting. Turns in 2019 but because of the coastal dynamics in that area, there's a lot of wind blown sand and a lot of Dune accumulation, which is, which is natural, it's what's happening in that environment. And very quickly, that area was entirely covered by windblown sand and sand dunes now developing there, which makes it entirely unsuitable for turn nesting. So our view is that even if you did put aside the argument about the Wheeldon case, that historic nesting location is not a feasible area to ever restore to attract nesting turns there. And that's our ultimate argument, which we have put forward to to Natural England and will put forward in our later HRA. So that's how we would deal with that particular point. We think there is further technical information, even if we remain in disagree with Natural England over how one interprets the wheel and case. It's not germane. It's not fundamental. I should say, to our conclusion. Thank you.

56:24

Okay, thank you for that explanation. Dr Gray, just bear with me one second. I just want to check if there's any points that I just want to ask any questions on. Just bear with me one second. There are I

56:44

and you say that there are some further court, further technical information, and that you'll be putting that forward in the HRA, is that what you've said, I should try to yes,

56:53

there has been a further apologies. I'm not clear about what's actually been submitted into the examination, that there has been a further update to the HRA, which is being produced various issues. And we have therefore taken the opportunity in response, in receipt of natural England's comment on that particular point, to add in some further justification along the lines that I've just explained to you, whether that has actually been submitted into the examination yet, I'm not certain. I'm afraid it hasn't. No, it

57:20

happened. Okay, that wasn't the case. All right. Thank you very much for that. I'm aware that we're due to take a break at 1130 I think that's probably unless the applicant has any further points to add on that agenda item, No,

57:40

not unless you have further questions.

Okay, so what I'm going to do is I'm going to move for any responses from the interested parties, whether we should make any comments on that agenda item. Okay, I can see nerves show off hands. So what I propose to do is 1128 which is break at 1130, to 15 minutes. I propose that we leave it there for now and then resume the agenda items after a break, but I should bring Mr. Buckler back to see what he has. They have any comments?

58:24

No comments. All I would say is, Dr Riley, we'd be grateful if the reasoning as to why the wooden judgment not being determinative be formally submitted into the examination. I know you've said you've you're looking to amend the HRA, and there'll be additional bits in there about that, but it would be helpful to have an explanatory note as well, somewhere, either directly or within that document or as an append appendices to that document as to justifying why you believe the wilderden judgment is not determinative. If I could ask that to be done, I'd be grateful. Yes, that

59:01

is in the version that has been updated in that we contain reference to the wielding judgment. But then explain why, not withstanding that judgment, the reasons that I have given subsequently response to those answers in response those questions are making fun. Those are additional technical reasons why they would not be able to re establish turn nesting there. So I think that effectively will address what you're asking for.

59:26

That's fine. And any idea as to what deadline you are submitting your advice to HRA,

59:35

that's half of my hands.

59:37

Sorry. So Harry would pop on behalf of the applicant. My understanding is that's going in at deadline six A,

59:43

right, perfect. That's what I was going to ask. What I was concerned about is, if you're going to say deadline seven, I was concerned whether there'd be enough time for various parties to absorb the information. End re appropriately. But deadline six A is perfect. Okay, in that instance, I. We are going to adjourn this meeting now until 1145 and we will be back 1145 shortly. Shortly, yes. Thank you very much. Applause.