[redacted]
From: SEPA [redacted]
Sent: Tue, 6 Sep 2022 08:39:31
To: SEPA [redacted]
Cc: SEPA [redacted] SEPA [redacted]
Subject: 20220906_Whiteshore Cockles para 7 draft
Importance: Normal
Sensitivity: None
Attachments:
FW_ Whiteshore Cockles.msg;

OFFICIAL

Hi [redacted],

Further to our previous emails below, I have now been sent information to justify the use of condensate application on farmland at North Uist. I have read through the main report which appears to be quite simplistic in it's justifications, however I presume the included condensate analyses and nutrient plan will provide the technical information SEPA require to sign off a potential Para 7 (I have not the knowledge to understand this fully).

On reading the main report I do not like that the consultant refers to this use as disposal (quite frequently) and that there is absolutely no mention of other potential environmental impacts other than diffuse pollution, such as odour (particularly as they propose a year round application).

I would be very appreciative if you could let me know your thoughts on this and if it appears accurate and viable?

Likewise, to [redacted], as the local team I would be keen to understand your perspective on this to.

Many thanks,

[redacted]

[redacted]
Waste & Industry Unit

[redacted]

OFFICIAL

From: [redacted]@sepa.org.uk>
Sent: 21 July 2022 10:06
To: [redacted]@sepa.org.uk>
Cc: [redacted]@SEPA.org.uk>; [redacted]@sepa.org.uk>
Subject: RE: 20220712_Whiteshore Cockles para 7 Nitrogen figure

OFFICIAL

Hi [redacted]

I've just rechecked the figures and it looks like the operator is right, and there was an error in my calculation of ammonium supply from the waste. In some ways, it's a bit of a moot point, as the copper concentration of the condensate limits maximum spread rate to 13 t/ha anyway.

This raises a further potential issue with the proposed para 7 – I had assessed most of the benefit to agriculture from the condensate spreading as being from nitrogen supply. With the ammonium supply being much lower than I had originally thought, this brings this benefit into question. The determination of total nitrogen that the applicant says [redacted] going to carry out will probably be crucial – unless this is relatively high (at least 2 g/t on a fresh weight basis), then they may struggle to put together a good argument that the proposed activity will deliver the required benefit to agriculture for a para 7. We'll see what further results say.

With Thanks,

[redacted]

OFFICIAL

From: [redacted]@sepa.org.uk>
Sent: 12 July 2022 11:50
To: [redacted]@sepa.org.uk>
Cc: [redacted]@SEPA.org.uk>; [redacted]@sepa.org.uk>
Subject: 20220712_Whiteshore Cockles para 7 Nitrogen figure

OFFICIAL

Hello [redacted]

Further to my email below I have attached an email from the operator re. condensate analyses and a query re. Nitrogen content and the 250kg/Ha figure. I haven't gotten my head around it to respond directly, but thought I'd keep you in the loop.

Good news is they are proceeding with the assistance of SAC and the preparation of a Draft Para 7 application in line with TG7 guidance.

Regards,

[redacted]

OFFICIAL

From: [redacted]@sepa.org.uk>
Sent: 05 July 2022 09:24
To: [redacted]@sepa.org.uk>
Cc: [redacted]@SEPA.org.uk>; [redacted]@sepa.org.uk>
Subject: RE: 20220704_Whiteshore Cockles para 7 problems

Hi [redacted]

Thanks for the update on this. I'm happy to provide further advice on any forthcoming para 7s from Whiteshore Cockles.

I would be a bit concerned if it was planned to spread all of the condensate to land. If they were even considering this, the consequences would need to be considered, for example, they would need a lot of storage in case weather conditions were not suitable for spreading for an extended period (quite likely in North Uist in winter in particular!). They would also need a very large landbank…I know they own a lot of land, but the question is whether they own enough suitable land for spreading.

I'm prepared to concede that Vallay Island may have >60 ha of suitable land for spreading, but I also think it is extremely unlikely that there is 160 ha of suitable land. I think it's probably in the range 60-100 ha, what I can't tell from GIS is how easy it is or otherwise to get a spreading tanker into the fields on the east side of the island. If access is difficult, it's going to be closer to 60 ha than 100 ha. A site visit may be helpful to determine this, but as you note, organising this could be difficult…

With Thanks,

[redacted]

From: [redacted]@sepa.org.uk>
Sent: 04 July 2022 15:30
To: [redacted]@sepa.org.uk>
Cc: [redacted]@SEPA.org.uk>; [redacted]@sepa.org.uk>
Subject: 20220704_Whiteshore Cockles para 7 problems

OFFICIAL

Hi [redacted]

Just a quick update to let you know that [redacted] and I met with the operator (Whiteshore Cockles) a few weeks ago and discussed the application of condensate to land. Prior to the meeting I had passed on your comments of the land study and also the clear requirement that any waste to land would need to comply with the WMX7 technical guidance.

They seem to have understood that any waste to land fall under a Para 7 and the requirements set out in the guidance are what they would need to meet. They intend to employ an agronomist from SAC to assist them in completing a DRAFT application in line with Para 7 Guidance. I asked once they have done this they pass to me and we can comment on the likelihood of it being approved or not as this would appear to have a big bearing on the future of the waste treatment plant in the area.

Something they were not accepting of was the interpretation of Valley Island only having 60Ha approximately of usable land, of course this is an estimation based on GIS so not a big concern to me, as I understand Vallay was just an example for the study. They were keen for SEPA to visit the area to better understand the situation, but I don't imagine we would be flying out there for a Para 7 alone at this stage. Also, we have colleagues locally who could be our eyes for any specific queries if you come to have any.

You were however also correct in presuming that the operator indicated that they would likely wish to spread to other areas of land on Uist if they could get the consent. In the meeting they were very 'hopeful' that all the condensate might be able to go to land, despite previous advice. This hope does worry me.

I am hopeful that the DRAFT application will inform both SEPA and the Operator of the reality of the situation and the long term options with the waste. I shall keep you informed when it is received and hopefully you can help assess with the more specific information.

Regards,

[redacted]

[redacted]
Waste & Indsutry Unit

[redacted]

OFFICIAL

From: [redacted]@sepa.org.uk>
Sent: 13 June 2022 09:15
To: [redacted]@SEPA.org.uk>; [redacted]@sepa.org.uk>; [redacted] <[redacted]@sepa.org.uk>; [redacted]@sepa.org.uk>
Subject: Whiteshore Cockles para 7 problems

OFFICIAL

Dear All,

A brief summary of the issues that could act as a barrier to approval of a paragraph 7 exemption for spreading the Whiteshore Cockles condensate are listed below:

- Neither the soil nor the waste have yet been fully assessed for all of the parameters that are listed as required for waste spread to land under paragraph 7 in the Technical Guidance Note WMX-TG7. This doesn't necessarily mean that there will be a complete restriction on spreading the waste, but does mean that it hasn't been fully assessed.
- The soil extractable phosphorus, potassium and magnesium results presented in Table 3.7 in the consultant's report are clearly incorrect (unrealistically low, so low that vegetation growth would be impossible). The assessment of phosphorus, potassium and magnesium indices for the soil as '0' is therefore also clearly incorrect, which affects the consultant's interpretation of how much additional phosphorus, potassium and magnesium is required to support crop growth. I also suspect that the extraction carried out to determine extractable phosphorus, potassium and magnesium levels in soil was not the standard ADAS Olsen's/ ammonium nitrate method extraction and therefore assigning an index value against the result is invalid.
- The report suggests that the waste will be spread at 478.52 t/ha per year. This is not allowed under paragraph 7 (maximum permitted spread rate is 250 t/ha).
- The report notes and assumption that the entire area of Vallay Island (260 ha) is available for spreading (section 3.3.2.2, page 22). This is clearly a faulty assumption, as much of the island is covered in dunes or bog, or is likely not accessible by a spreading tanker due to lack of suitable roads/tracks, ground conditions and/or gradient. There may be around 60 ha at most on the west side of the island that is suitable for spreading.
- The concentration of nitrogen or copper in the waste is likely to restrict spread rate. On the basis of the ammonia result alone, spread rates higher that 25 t/ha would not be allowed as the total amount of nitrogen added would exceed the 250 kg/ha limit for total nitrogen set out the Waste Management Licensing Regulations. In reality, the maximum allowable spread rate is likely to be less than 25 t/ha, as not all the nitrogen in the waste will be in the form of ammonia. The operator doesn't appear to have analysed the waste for total nitrogen, so it's not clear exactly how much this restricts spread rate. Total nitrogen analysis for the waste is required before the maximum allowed spread rate for the waste can be clearly established.
- The copper concentration in the waste (540 mg/kg on a fresh weight basis) is high enough to restrict spread rate to a maximum of 13 t/ha per year, against a guideline maximum annual addition rate for copper of 7.5 kg/ha (taken from the Sludge (Use in Agriculture) Regulations 1989) that SEPA usually requires para 7 applications to adhere to.
- If spread rates are restricted to 13 t/ha per year, to spread a total of 1,267.5 t of waste, the operator is going to need a land bank of at least 97.5 ha – much more than is available on Vallay Island alone.

- The high ammonia content of the waste means that it has significant potential to produce odour during spreading.
- The waste has a very high biological oxygen demand (BOD = 821,000 mg/l). This presents a risk to aquatic organisms in coastal waters if the waste is spread to adjacent land, particularly if this land has sandy soils, as on Vallay Island and probably across much of the coastal areas of North Uist.

Please let me know if you have any questions about this. Nothing noted above makes it completely impossible to spread the waste under paragraph 7, but the issues mentioned above need to be considered and addressed by the applicant and it's likely that they will need more land to spread the waste on than they had initially considered, certainly more than Vallay Island, due to restrictions on maximum suitable spread rate. Note that I didn't mention the copper addition issue during Friday's meeting – I've just spotted it on rechecking the data before I sent this email out!

With Thanks,

[redacted]