

From: SEPA

Sent: 15 June 2022 12:50:21

To: SEPA SEPA SEPA SEPA

Subject: RE: Whiteshore Cockles para 7 problems

Importance: Normal

Sensitivity: None

Thanks

I met with the council today and made them aware of how we regulate para 7s etc, they might come back to you directly about the Part A. What I was reminded of was that Vallay Island is designated (as much of Uist is) with SSSI, SPA and SAC primarily. Just to complicate things a bit more!

Cheers

From: @sepa.org.uk>

Sent: 13 June 2022 09:15

To: @SEPA.org.uk>; @sepa.org.uk>; @sepa.org.uk>

Subject: Whiteshore Cockles para 7 problems

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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 than 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 in 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,



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