

Response ID ANON-8SWU-XUDN-P

Submitted to **The Use of Gypsum to Improve Soil Conditions**

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Introduction

1 What is your name?

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3 What is your organisation?

Organisation:

Renewable Energy Association

4 Do you have any views on the potential impact of the proposed guidance?

Response:

Yes. REA consulted our members and although we only received a handful of comments, there were some important points raised.

Business impact

In terms of the potential impact of the proposed guidance, some members have reported that it will affect their business and that the guidance will result in gypsum material being taken to England to be spread under a standard rules permit. There will be an additional cost to Scottish companies for this, estimated to be between £17-25 per tonne, which will have a significant impact for those businesses who are currently recycling gypsum.

To remove, to all intents and purposes, the route for the recovery of gypsum to land would mean that all gypsum not used in plasterboard or cement manufacture would either be disposed of to landfill or transported for recovery in England. This not only impacts upon the costs of businesses in Scotland, but also on the Zero Waste ambitions of industry and Scotland as a whole.

Benefits to soil

Some of our members report that there is a potential soil structural benefit from applying gypsum on medium and heavy textured soils with a low organic content which is not covered by the guidance. Calcium sulphate helps improve the structure and physical conditions of clay soils by loosening tight compacted particles and flocculating small particles. This makes air spaces for water and nutrient movement. It can also benefit soils that are all well above target pH and have very high Mg indices. It has also been shown to play a significant role in controlling phosphorus (P) in runoff.

To reduce the application rate to 200kg/ha purely for S supply, bearing in mind the availability of sulphur, ignores the potential use on high soil pH and high Mg index. A maximum application of 200kg/ha for S requirement will supply around 10kg/ha, this may be insufficient for crop needs and also virtually impossible to apply evenly and accurately.

It was reported by some members that for saline intruded farmland, application rates in England have been used successfully at rates up to 20t/ha after flooding events. On badly structured soils, rates up to 10t/ha can be applied, with the correct justification, without detriment to the soil or human health.

Research

There have been various studies looking in to the effects of gypsum on agricultural land, by WRAP, ADAS and also WRc on behalf of the Environment Agency. There is a large amount of information available in the public domain that also explains the benefits of gypsum on soil structure.

Mushroom compost

Whilst we realise that the guidance is looking at use of gypsum to improve soil conditions, it was highlighted by one of our members that there is an issue overlooked by the guidance. This is that gypsum can be used in mushroom compost production and can be a very valuable addition to the quality of the process and should not be undermined. The guidance states that gypsum should not be used with other organic materials but in a high-rate composting process, it can be beneficial to the biological activity of the material. In particular it tends to improve retention of nitrogen in the compost, thereby increasing nutrient content, and conversely reducing emissions of ammonia during compost production. WRAP have carried out some research showing this:

<http://www.wrap.org.uk/sites/files/wrap/Using%20waste%20plasterboard%20in%20mushroom%20compost.pdf>. We would not like this beneficial use to be excluded as a result of the guidance.