

CERI ENVIRONMENTAL CONSULTING LTD

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Date: 15th June 2015

Dear Louise

Further to your letter of the 27 May 2015 I am currently collating the information you require with regards to parts 1-7 of the Schedule 5 Notice. However, in the meantime I would like to reply with regards to part 8 of that notice.

I can confirm that there are two types of surfacing on the outside yard area. The area between the building and the RDF/SRF storage is laid with 'impermeable' concrete and the area where the outside RDF/SRF storage takes place is permeable hardstanding. As you will appreciate there is in reality a range of permeabilities for various materials all being permeable to a certain extent. The hardstanding at the Paperback site is very well compacted so this will reduce the level of permeability and aid run off but will not remove all possible infiltration into the ground.

My understanding is that the issue of concern is the infiltration of fire water into the ground in the event of a fire. I am assuming, as stated in the risk assessment submitted with the application, that the risk of contaminated run off from the baled RDF/SRF which is produced at this site (ie no biodegradables) is considered to be adequately contained.

I understand that you need to consider the risk of a fire and the potential for fire water generation and the potential risk this may pose to the environment.

As you state, NRW is required to ensure measures are in place to prevent or to minimize pollution. Again, as you state, this could be achieved by the outside storage areas being laid with an 'impermeable' surface and with sealed drainage.

Pollution prevention control measures need to be assessed against the risk posed to various receptors. In terms of risk management the principle is to reduce the risk as far as is reasonably practicable and necessary in the circumstances. Something is reasonably practicable unless its costs are disproportionate to the benefits.

The risk in question is fire water run off and the receptors are surface waters and groundwater.

The surface of the site is permeable but due to good compaction of the hardcore making up the surface material there will be run off as well as slow infiltration. The run off is contained by a perimeter soil bund and the slope of the yard, which will direct the majority of run off towards the concreted part of the site. Here it will be contained within the drainage system which can be sealed (prevented from discharging to drainage system) in a fire event. This will allow the run off to be contained and recirculated if appropriate or it can be tankered off site to maintain capacity. The surface water features should therefore be protected.

There may therefore be some residual risk of fire water slowly seeping into the ground and affecting groundwater.

The facility is not within a groundwater source protection zone.

The groundwater below the site is classed as a secondary undifferentiated aquifer (superficial deposits) and the bedrock is classified as secondary B aquifer (www.environment-agency.gov.uk "What's in your backyard")

Secondary B aquifers are predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

Secondary Undifferentiated aquifer designation has been assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

The aquifer designation status gives an indication of the importance of the aquifer for drinking water and thus provides an indication of the level of harm that could result from a pollution event (ref New Groundwater Vulnerability Mapping Methodology Report: SC040016).

The bedrock below the site is in the lower coal measures formation and the superficial deposits are clay, silts and sand (www.bgs.ac.uk).

The groundwater below the site may well be affected by saline intrusion due to its location.

H1 Annex A – Amenity & accident risk for installations and waste activities informs us that in order to assess risk we need to undertake the following steps :

- 1) What steps are you taking to manage risks?
- 2) What are the chances of causing harm?
- 3) How serious could the harm be?
- 4) What is the overall risk?
- 5) Identify what you could harm

We have identified that we are assessing harm to groundwater from fire water. The steps being taken to manage that risk are fire prevention measures. As good fire prevention measures are already in place and are also ongoing in the form of de stocking measures the chances of a fire are low and decreasing. The seriousness of the harm based upon the aquifer designations is low. The overall risk is therefore low.

You have suggested two possible scenarios; one being no outside storage permitted. This is not an option for the facility, as the storage of RDF/SRF is needed for the site to operate. The second scenario is to lay an impermeable surface at the site. My client is concerned that the cost of implementing this infrastructure measure is prohibitive. The area for storage needs to remain large so that stack size can be reduced and separation distances increased. For such a low risk event (fire) ie an unlikely event, which is unlikely to cause severe harm, I would like to suggest that the proposed infrastructure is not justified to address the risk identified.

I would be grateful if you could consider this position and let me know if NRW's views with regards to this matter.

Yours sincerely,

Clare Walters

Director