To: Karl Coggins, Luke Middleton, Ken Bucke, Alan Sheridan

Re: Pollution incident for Knockacummer Wind Farm Ltd., TFL00376919

I hereby declare that this statement is true to the best of my knowledge and belief and that I make it knowing that if it is tendered in evidence, I will be liable to prosecution if I state in it anything which I know to be false or do not believe to be true.

I am a Forest Service inspector, with the Forest Service, with my headquarters at Hibernian house, South Mall, Cork city, county Cork. I inspected the site in Glennakeel South townland, Clonfert East, Kanturk, Co. Cork on the 31-03-2020 (see map 1 and 2).

There is a clearfell harvesting operation in progress. The felling licence number is TFL00376919. The plot being clearfelled and which are relevant to this pollution incident is plot 1.

There is very severe rutting of the main extraction route running through the site, from the north-western area of plot 1, to the log stacking area on the southern-eastern boundary (see map 3 and photos 1 to 5). Some of the liquidised soil is entering drains and flowing overland and ultimately entering a first order stream, which originates in the north-eastern area of plot 1 and discolouring the water (Photo 6). The streams flow into the Feale river, approximately 6 kilometres downstream, which is part of the Lower Shannon river sac. The site is within the Mullaghereirk SPA for hen harriers.

The applicant hasn't adequately adhered to the conditions of the felling license. They have not adhered to the Forest and Water Quality guidelines, Forest Harvesting and the Environment guidelines, Standards for Felling and reforestation and Appropriate Assessment mitigation measures. There are no silt traps evident in the drains in the affected areas. Brushing of the extraction route is completely inadequate. The contractor told me there isn't adequate brash available on the site, however, that does not excuse the condition of the extraction route and stream.

I recommend that the license, TFL00376919, associated with this harvesting be cancelled, due to the pollution incident being caused by the rutting and completely inadequate mitigation measures.

I have requested that my colleague, Mr. Ken Bucke, inspect the site, to determine any additional mitigation measures. Due to the moderate slope and large amount of unconsolidated peat/rutted extraction routes, there is a very high risk of peat flowing down the slope and into the stream. The applicant should be instructed to stop all further extraction activity, until the damage is corrected and adequate remedial mitigation measures are put in place, namely:

1. Extensive re-brashing of the main extraction route and secondary extraction routes, with brash ramps every 30-40m.

2. Installation of a geotextile silt barrier erected along the area to the south and east of the stream. A barrier won't hold up to the weight of peat and water after heavy rain, so more long term measures also need to be put in place.
3. Physically removing large deposits of liquid soil, which will flow into the stream, when it rains and depositing them away from any possible pathways into the streams.
4. A reinspection takes place by inspectors to ensure remedial mitigation measures are put in place and effective.
5. Any other measures requested by the Inland Fisheries inspector (Mrs. Jane Gileran).

Without remedial actions, there is a real risk of a <u>much</u> larger pollution incident taking place in the future, when it rains and the disturbed peat soil/liquidised peat soil flows down the slope and off the site.

I have notified Inland Fisheries Ireland, NPWS and Cork county council.

I have read over the above statement.

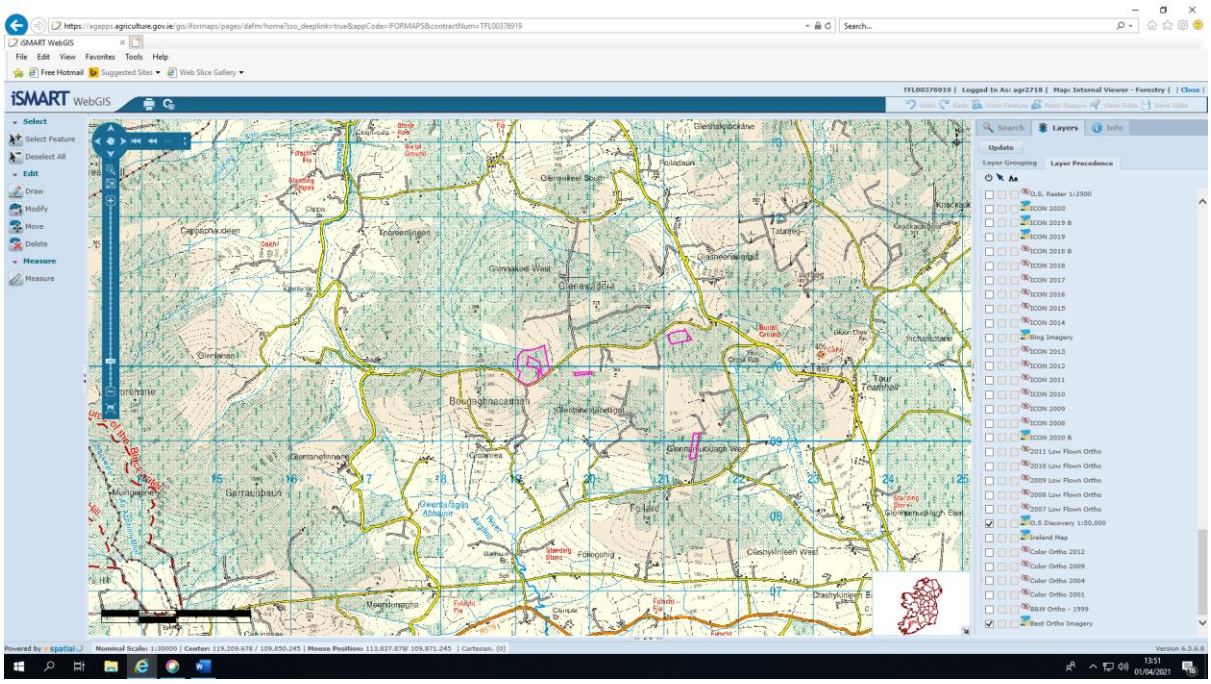
Signed: Brian Mahoney

Mr. Brian Mahoney

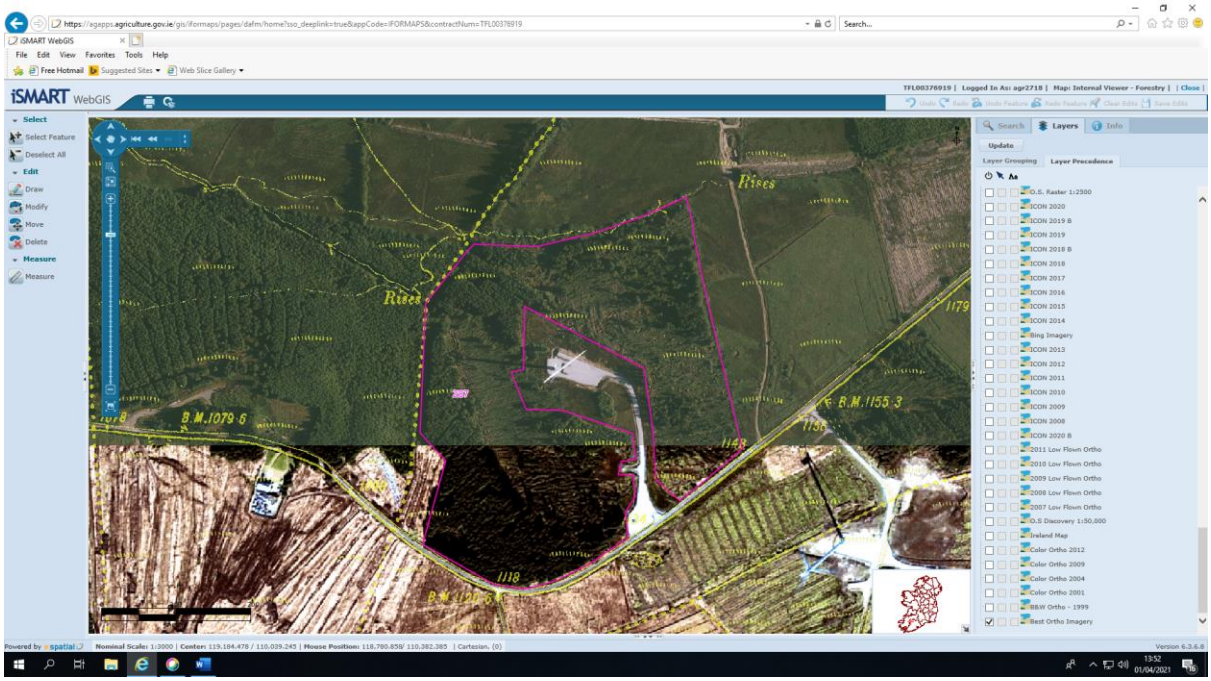
Forest Service inspector. Grade 2.

1st of April 2021

Map 1. Location map



Map 2. Site map. 6 inch OS layer overlayed on the aerial photo. The hydrological network of 1st order streams are clearly shown with the > symbol and yellow line. The stream actually continues into the north-western area of plot 1, where its source is located.



Map 3. The main extraction route is very heavily rutted and is highlighted as the broader orange line running north from the forest road turning area, where the logs are stacked. The approximate pathway of the sediment, flows east in the 1st order stream, which joins another stream further east, where they flow south to join with another stream as they exit the forest property. The pathway of the sediment laden water is highlighted in orange/yellow. Secondary extraction routes are located either side of the main extraction route. Locations are approximate.

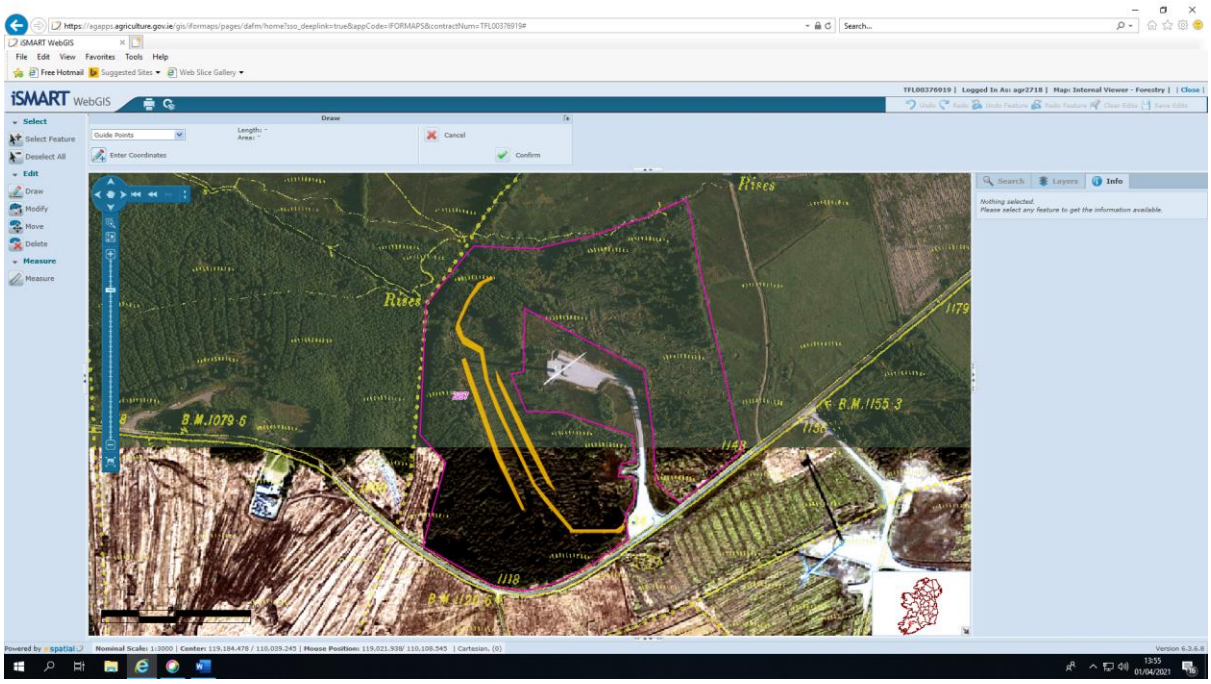


Photo 1. Very severe rutting of the main extraction route, about halfway from the log stacking area to the stream.

Photo 2. Very heavy rutting of the main extraction route, further north than photo 1. The peat soil either soil is disturbed and unconsolidated. There is a high risk of peat sliding after heavy rain.

Photo 3. Liquidised peat soil beside one of the extraction routes. The 1st order stream in located in the background of this photo. There is overland flow of water from this area towards the stream.

Photo 4. Previously used extraction route, to the west of the current, main extraction route. Very extreme rutting. It is impossible to walk safely across this area, are the soil is liquified. This area represents a large potential source of pollution, if it rains and starts flowing off the site.

Photo 5. Large area of disturbed, unconsolidated peat immediately to the south-east of the stream. The water flowing in this photo flows directly into the stream which is located to the right of the background.

Photo 6. Badly discoloured, silt laden stream flowing west out off the site.