

Report on Notice of Motion

Motion:

"That this Council would investigate or report on any recent investigations of what appears to be leachate flowing from the former Raffeen Landfill Site (now the Raffeen Civic Amenity Site) into the Cork Harbour SPA at Monkstown Creek." – Councillor Marcia Dalton.

Report:

Cork County Council operates the closed landfill site at Raffeen, near Monkstown, Co. Cork. The site was granted a waste licence by the Environmental Protection Agency (EPA) on 24 May 2001. Landfilling of non-hazardous waste took place at the site from 1979 to 2001 and waste acceptance ceased on site in October 2001. The site is monitored and controlled by Cork County Council who undertake environmental monitoring in accordance with the waste licence (W0023-1), as amended.

Restoration of the site (including lined capping, installation of gas abstraction and leachate collection systems, and landscaping works) was undertaken during 2005-2007. Since then the landfill has been in the aftercare monitoring stage. A civic amenity centre for recycling was constructed on the site and has been open to the public since 2005.

Following a complaint to the County Council's Environment Section from a member of public at approx 11.30 am on the 8 January 2016, it was noted that water was breaking out of the slope at the south east corner of the site. The EPA based at Inniscarra, were also notified that afternoon of the incident by Cork County Council. The water was running across the road (L2489) before entering the drain on the opposite side of the road. The water flowing across the road was leaving a reddish stain on the road. It was evident that this was iron pan from the edge of the embankment where the water was flowing from.

It is evident that extreme rainfall over the previous two months was responsible for the breakout of water at the surface water swale at the south east corner of the closed landfill. The Cork area saw rainfall at a level of 116 % and 302 % of average for period 1981-2010 recorded in November and December 2015 respectively and at 191% of average in January 2016.

Monitoring of the water was conducted on 8th January 2016 at three locations and following clearance of scrub on site, in order to allow access to the area of the water breakout, a further two samples (SW 1 Outfall and SW4 Swale), were collected on the 20th January 2016. A further sample was taken in February 2016 at SW 1 Outfall.

As agreed with the EPA, the pumping regime on site was altered, so as to focus on the pumping of leachate in the immediate area of the outbreak in order to reduce the leachate level locally and thereby abate or stop the outbreak. Measures were put in place with the leachate haulage contractor to ensure that we could move leachate off site as necessary and that the site had priority status.

As also agreed with the EPA, we engaged the services of a lining contractor to undertake some works on site in relation to the surface water swales and capping liner, to investigate the source of the flow. This contractor examined the construction of the swales and undertook works including cleaning out the pipes in some of the swales, checking that the swales were working as intended, some liner repair works near some manholes as well as checking for surface water ponding on site.

The combined results of the samples collected in January & February, referred to earlier, would indicate that the water emanating from the swale may have been coming into contact with leachate and or waste. This is evident from levels detected in the swale, which are higher than normal levels for surface water but less than the levels recorded in the December 2015 leachate samples.

It is evident that the red staining is leaching of the iron pan from the embankment. This is resulting in staining of the roadway, which ceased subsequently, when the outbreak was stopped. A proposal to wash the road has been received from a suitable local contractor and a Temporary Traffic Management Plan is being prepared by that contractor, to be agreed in advance with the local area office, before works commence.

We are in the process of preparing a closure report to the EPA on this matter, which we can provide in due course, when finalised, if necessary.

***Mr. Enda Kiernan,
Executive Engineer
Waste Section
Environment Directorate.***

15th July, 2016