

Damien Holmes

From: mailmeter@louthcoco.ie
Sent: 23 September 2016 12:02
To: Damien Holmes
Subject: Your restored MailMeter archived email
Attachments: Details_OF_Your_Original_Message_81839130-f66c-4f31-a6f7-ab3bb6840a4f.htm; ibr0785 002 proposed site layout (a).pdf; image001.png; image002.png; priority substances ectc006757.pdf

Peadar

SENT 9/3/16

To follow up in relation to the above I have tried to summarize our position below.

Could you take this up with Irish Water again and let us know the outcome

Thanks

Damien

Application for new connection to foul sewer at Dundalk Landfill

Introduction

There is an issue with contamination of the drainage ditch/stream along the northern boundary of Dundalk landfill. Investigations indicate that the contamination is coming from the closed landfill. Louth County Council are under pressure from the EPA to put measures in place to remedy this situation.

Louth County Council propose to install an interceptor trench along a 120m long stretch of the drainage channel and divert it to foul sewer (see Drawing IBR0785/02 Attached). A new discharge point is required in order to allow the drainage works to be carried out without the need for pumping and excavation of wastes. There is an existing discharge point for leachate to foul sewer set in the Waste Licence (W0034-02) "S2 – Leachate from Landfill". S2 is located approximately 350m south of the proposed new discharge point.

Background

An request for connection to foul sewer was made to Irish Water, via the Council Water Services Section.

Irish Water responded saying that in relation to ammonia loading "the impact on the plant would be negligible (possibly not even measurable)".

Water Services responded to Irish Water requesting that the same loading calculation be carried out for priority substances e.g. VOC's, PAH's, Metals etc. Which cannot be eliminated by treatment at the WWTP.

However, Irish Waters last response seems to have ruled out granting consent to discharge to sewer even though in the same email they say screening should be carried out for priority substances (see chain of emails below).

A review of the Priority Substances Assessment section of the 2014 AER for Dundalk WWTP, which was referenced in Irish Waters last email, shows the following:

Out of the full suite of 54 priority substances only 17 were above the AA-EQS before dilution in the receiving waters (Mecoprop, Copper, Cadmium, Mercury, Chromium, Selenium, Antimony, Tin, Barium, Boron, Cobalt, Vanadium, DEHP and 4 x PAH's).

Out of these 17 substances 7 are "considered that they will not have a negative impact on the receiving environment" (Mecoprop, Copper, Cadmium, Mercury, Chromium, Selenium, Antimony).

Out of the remaining 10 substances 9 are considered to need more assessment as the limits of detection in the analysis carried out were not low enough (Tin, Boron, Cobalt, Vanadium, DEHP, 4 x PAH's).

The one remaining compound, Barium, was detected at 16 times below the drinking water limit of 700ug/l but was almost 45 times above the surface water AA-EQS of 1ug/l (44.95ug/l). Further monitoring was recommended to assess if Barium could be impacting on the receiving waters. Barium is not listed in Tables 11 or 12 of Schedule 6 of SI 272 of 2009 (SW Regulations) as referenced in the Technical Amendment to the Discharge licence for Dundalk WWTP.

Review of Irish Waters Response/Recommendations

1. Irish Waters response seems to have prematurely ruled out granting consent to discharge to sewer as in the same email they say screening should be carried out for priority substances. The same loading calculation used to assess the ammonia load should be used to assess the priority substances, as was suggested by Water Services.
2. A sample for the full suite of Priority Substances has been taken from the proposed discharge, see attached results. These results should be used to assess the impact of the proposed discharge on the discharge from the treatment plant.
3. If Irish Water refuses a new connection to sewer Louth County Council could utilise the existing discharge point to foul sewer at S2. However this will incur additional pumping and capital costs.

The table below compares the Emission Limit Values for discharges to sewer at S2 to the maximum and average results for SW2 since 2004.

Parameter	Emission Limit Value (W0034-02)	Max. Result 2004 - 2015	Average Result 2004-2015
BOD (mg/l)	2,000	417	30
COD (mg/l)	9,000	1750	221
Sus. Solids (mg/l)	2,000	11950*	501
SO4 (mg/l)	400	161.9	46
pH	6-9	7 – 8.6	-

Temperature (°C)	40	18.2	-
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* This one result is out of line with all other results and has been excluded for the calculation of the average Result.

There is no emission limit set for any priority substance in the existing Waste Licence Conditions

4. From an overall environmental benefit for Dundalk Bay it would be better to collect and treat the discharge rather than allow it to discharge indirectly to waters as is currently the case. This could help Dundalk WWTP to comply with the EQS for the receiving waters by improving overall receiving water quality. There will be no net increase of emissions to Dundalk Bay as the source is already discharging to waters.

Damien Holmes

From: Peadar Mc Guinness
Sent: 10 December 2015 22:08
To: Damien Holmes
Cc: Pat Finn
Subject: Fwd: Proposed connection to Foul Sewer at Dundalk Landfill

Hello Damien

See response back from IW.
Any queries just let me know.

Regards
Peadar

Sent from my Samsung device

----- Original message -----

From: Ronan Connolly <rconnolly@water.ie>
Date: 10/12/2015 15:50 (GMT+00:00)
To: Peadar Mc Guinness <Peadar.McGuinness@louthcoco.ie>
Cc: Joanne McGuinness <joannemcguinness@water.ie>, Catherine Duff <catherine.duff@louthcoco.ie>, Peter McNulty <pmcnulty@water.ie>, Morgan Cox <mcox@water.ie>
Subject: RE: Proposed connection to Foul Sewer at Dundalk Landfill

Peadar,

From a licensing perspective, any new emission from the Landfill would require a Technical Amendment or a Review of the existing EPA Waste licence regulating the site and its emissions. A S16 licence is not applicable as the landfill is an EPA licensed facility.

Notwithstanding the ability of the Dundalk wwtp to potentially cater for the added Ammonia load as outlined in Peters e-mail below, the risk from priority substances in the proposed discharge (which cannot be eliminated by treatment at the wwtp) remains as an obstacle to Irish Water granting a consent for the proposed discharge to sewer.

A number of priority substances have already been identified as potentially being higher than the required EQS, at 95 percentile flows at the downstream Dundalk wwtp (D0053) (http://www.epa.ie/licences/lic_eDMS/090151b2805299ec.pdf) and Irish Water are therefore not willing to accept further discharges to the network which may contain priority substances.

Before any consent could be considered, a full screening for priority substances would need to be carried out on the proposed discharge. If priority substances were identified, a consent to discharge to the sewer would not be granted.

Therefore I think consider it prudent that Louth County Council consider an alternative means to close out the EPA concerns which does not involve a connection to the sewer.

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Kind Regards,

Ronan

Ronan Connolly
Environmental Policy and Licensing Support Officer

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 Please consider the environment before printing this e-mail

From: LA_pmcguinness
Sent: 19 November 2015 12:27
To: Peter McNulty
Cc: Morgan Cox; Joanne McGuinness; LA_cduff
Subject: RE: Proposed connection to Foul Sewer at Dundalk Landfill

Thanks for this Peter

Based on your calculations in relation to ammonia I don't think there is a need to go the composite sampling route.

Would it be possible to apply the same loading calculation to the priority substances? It may also be negligible but would help us come to the final decision.

Our environment tells me he has to respond to the EPA on this by the end of next week if that suits.

Regards

Peadar

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From: Peter McNulty [<mailto:pmcnulty@water.ie>]
Sent: 18 November 2015 15:29
To: Peadar Mc Guinness
Cc: Morgan Cox; Joanne McGuinness
Subject: RE: Proposed connection to Foul Sewer at Dundalk Landfill

Peadar/Morgan

I contacted John Byrne this afternoon and he advised that SW1 would be the highest concentration point and would represent the concentrations that could be discharged to the sewer. Taking the max value for Ammonia Concentration and assuming the max flow of 0.5l/s is correct the following would be the max kg Ammonia and equivalent PE loads to the plant. This would represent absolute worst case scenario loads and in fact the actual loads should be far less than this. If the information given is correct the impact on the plant would be negligible (possibly not even measurable) and the potential measured increases in the influent to the plant should be taken as absolute worst case scenarios. This is based on the information given. As a further check I have looked at rainfall data around the times of highest concentration and I note that the rainfall levels (Dublin Airport 30 year data) were

very low or in fact none around these times which gives further comfort as this would indicate that high concentrations do not correspond to high rainfalls flushing leachate out of the landfill. This indicates that the high concentrations are due to low levels of water in the drainage ditch which means that the load to the plant would be correspondingly much much lower than that indicated by the worst case scenario.

If we wanted to be sure I would suggest a temporary pumping and composite sampling regime for a short period of time where we pump to the LA sewer and take composite samples for testing to determine the maximum ammonia load. I would expect that this would indicate that the load will be very low and much lower than the worst case scenario outlined below.

	Max Load to WWTP based on 0.5l/s and Max Concentrations	Ammonia concentration increase mg/l at the plant based on DWF of 18000m3/day	Equivalent ammonia as PE based on 12 g Ammonia = 1PE
2004	0.2	0.0	19.4
2005	3.9	0.2	325.8
2006	35.8	2.0	2987.3
2007	0.2	0.0	18.7
2008	0.7	0.0	60.1
2009	0.2	0.0	12.6
2010	13.6	0.8	1132.2
2011	26.7	1.5	2228.0
2012	18.9	1.1	1579.0
2013	2.4	0.1	203.4
2014	3.6	0.2	298.8
2015	2.3	0.1	194.4

Best regards

Peter McNulty,

Irish Water

Operations and Maintenance Team

Eastern/Midlands

Wastewater Engineer

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Dublin, Ireland.



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 Please consider the environment before printing this e-mail

From: Peadar Mc Guinness [<mailto:Peadar.McGuinness@louthccco.ie>]

Sent: 16 November 2015 18:29

To: Morgan Cox

Cc: Joanne McGuinness; Donal Heaney; Peter McNulty; LA McDuff

Subject: FW: Proposed connection to Foul Sewer at Dundalk Landfill

Morgan

See below and attached.

Can Joanne comment on the need for a licence and also get Peters opinion on effect of discharge on the plant process.

The discharge may also have an effect on the priority substances section in AER. We have given some commitment to address priority substances at source to the EPA even though either way it will end up in Dundalk Bay. Treatment probably won't remove all of the substances.

Let me know what you think.

Regards

Peadar

From: Damien Holmes
Sent: 16 November 2015 14:43
To: Peadar Mc Guinness
Subject: Proposed connection to Foul Sewer at Dundalk Landfill

Peadar

See attached drawing showing a proposed connection to the foul sewer behind V& W Recycling/Dundalk landfill in Dowdallshill.

I spoke to Martin McCreesh about it and he would be happy enough to give a connection her but he said to speak to yourself about the quality of the discharge to sewer.

It is basically a drainage ditch along the northern boundary of the landfill which is slightly contaminated with leachate. The EPA want us to do something to prevent this contamination entering the stream and eventually Dundalk Bay.

So we are proposing connecting to the sewer (at F1) and draining a section of this area to the sewer. The section I want to drain initially is between SW1 and SW2.

I don't have any detailed info on flow except to say it is a low flow possibly about 0.5l/s in very wet circumstances to dry during the summer.

I attach monitoring results from 2004 to 2015 for SW1 to SW4 as shown on the attached drawing.

What would I need to do to get an agreement to discharge this to sewer? What cost would be involved for getting the connection and what would be the ongoing charging costs?

Would it need a Section 16 licence or could it be done under the Waste Licence for the Landfill?

Thanks

Damien

From: John Byrne [<mailto:john.byrne@rpsgroup.com>]
Sent: 16 November 2015 11:31
To: Damien Holmes
Subject: Dundalk

Damien

I have adjusted the drawing again this morning. What do you think of this?? Is this where you remember the pipe you saw. The drawing I think is accurate and reflects a couple of sources for existing layout.

I wont write up until you come back.

John

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John Byrne

Construction Manager

RPS Consulting Engineers

Tel: 07850 649939

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