Our Case Number: ABP-319561-24

Planning Authority Reference Number: EX17/2024

Your Reference: Ballynagran Landfill Limited

An Bord Pleanála

Genesis Planning Consultants
Dean Swift Building
Armagh Business Park
Hamiltonsbawn Road
Armagh
BT60 1HW
Northern Ireland

Date: 27 March 2025

Re: Whether the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper along the local road L1113, crossing the N11 and R751 is or is not development or is or is not exempted development
Ballynagran to Ballynerrin Upper, Co. Wicklow

Dear Sir / Madam,

I have been asked by An Bord Pleanála to refer to the above-mentioned referral.

The Board has examined the referral and is of opinion that certain information is necessary for the purpose of enabling it to determine it.

In accordance with section 132 of the Planning and Development Act, 2000, (as amended), as applied to referrals you are required to submit, on or before **23rd April 2025** the following.

- **Details of the expected concentration ranges of the treated leachate permeate for relevant parameters having particular regard to hazardous substances.**

- **Details of the destination wastewater treatment plant (WWTP) to which the treated leachate permeate is to be piped to and its ultimate discharge location.**

- **Demonstration that the WWTP has the capability to treat the permeate to the necessary standard such that its subsequent discharge will not affect the integrity of any European site.**

Teil	**Tel**	(01) 858 8100
Glao Áitiúil	**LoCall**	1800 275 175
Facs	**Fax**	(01) 872 2684
Láithreán Gréasáin	**Website**	www.pleanala.ie
Ríomhphost	**Email**	bord@pleanala.ie

64 Sráid Maoilbhríde
Baile Átha Cliath 1
D01 V902

64 Marlborough Street
Dublin 1
D01 V902

- **An updated AA screening report which addresses the destination and treatment of the permeate.**

If the information required is not received before the end of the specified period, the Board will dismiss or otherwise determine the referral without further notice to you in accordance with section 133 of the 2000 Act, (as amended), as applied to referrals. Your submission should be received by the Board not later than 5.30 p.m. on the date specified above.

Please note when making a response/submission only to the referral it may be emailed to appeals@pleanala.ie and there is no fee required.

Please quote the above referral number in any further correspondence.

Yours faithfully,

Catherine Flynn
Executive Officer
Direct Line: 01-8737143

BPRL71 Registered Post

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Glao Áitiúil	**LoCall**	1800 275 175
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64 Marlborough Street
Dublin 1
D01 V902

GENESIS
PLANNING
CONSULTANTS

An Bord Pleanala
64 Marlborough Street
Dublin 1
D01 V902

AN BORD PLEANÁLA
LDG-
ABP-
23 APR 2025
Fee: € Type:
Time: 14:33 By: HAND

23rd April 2025

Your reference: 319561-24
Planning reference: EX17/2024, Wicklow County Council

AN BORD PLEANÁLA
LDG-
ABP-
23 APR 2025
Fee: € Type:
Time: 14:33 By: HAND

Dear Sir/Madam,

On behalf of the applicant, Ballynagran Landfill Ltd, please find attached additional information that addresses matters raised in letter dated 27th March 205.

In the context of enclosures and application particulars we trust all is in order.

Yours sincerely,

Ronan Woods
Director

Office UK: Dean Swift Building, Armagh Business Park,
Hamiltonsbawn Road, Armagh, BT60 1HW
Email: info@genesisplanning.co.uk

Tel: (+44) 28 30493 001
Tel: (+353) 45 571 682

GENESIS
PLANNING
CONSULTANTS

Enclosures

- Response Letter from Fingleton White addressing the 4no. queries as per ABP letter dated 27th March 2025 with appendices
  - Appendix A: Permeate Test Results
  - Appendix B: Letter from Uisce Éireann with Confirmation that Wicklow WWTP Capacity to Accept Permeate
  - Appendix C: Confirmation of Signed and Paid Agreement with Uisce Éireann
  - Appendix D: Appropriate Assessment Screening by Axis
  - Appendix E: Wicklow WWTP Annual Environmental Report 2022 and 2023

Fingleton White
Bridge Street Centre
Portlaoise, Ireland

T: +353 57 8665400
F: +353 57 8665444
E: info@fingleton.ie
W: www.fingleton.ie

ABP Case Number: ABP-319561-24
Planning Authority Reference Number: EX17/2024

An Bord Pleanála
64 Marlborough Street,
Rotunda,
Dublin 1,
D01 V902

23rd April 2025

To whom it may concern,

Please find responses below to the additional information requested by An Bord Pleanála to enable a determination to be made.

1. **Details of the expected concentration ranges of the treated leachate permeate for relevant parameters having particular regard to hazardous substances.**

Please refer to Appendix A for sets of test results including Polycyclic Aromatic Hydrocarbons (PAH), pesticides, Semi Volatile Organic Compounds (SVOC), Volatile Organic Compounds (VOC), metals, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), conductivity, pH, Suspended Solids (SS), ammonia, etc.

Overall, the results illustrate that the permeate is less than the limit of detection for a wide range of test parameters including no detected PCBs and VOCs.

These test results were submitted to Uisce Éireann during the connection application process and in the detailed design pack. Uisce Éireann performed a technical assessment of the permeate parameters and the capability of Wicklow wastewater treatment plant (WWTP) to process the proposed quality of permeate before issuing a connection offer to Ballynagran Landfill. Refer to Appendix B for a letter from Uisce Éireann confirming the Wicklow WWTP has the capacity to process the permeate's expected concentration ranges and that the WWTP will continue to meet the EPA discharge licence emission limit values (ELV).

2. **Details of the destination wastewater treatment plant (WWTP) to which the treated leachate permeate is to be piped to and its ultimate discharge location.**

The destination WWTP is Wicklow WWTP. Wicklow WWTP with a Plant Capacity PE of 34,000, the treatment type is 2 - Secondary treatment. The WWTP treats the wastewater in line with the EPA Waste Water Discharge licence D0012-01 before discharging via its primary wastewater discharge point SW1, TPEFF3400D0012SW001 located at 331534 E, 194326 N in the Irish Sea.

3. **Demonstration that the WWTP has the capability to treat the permeate to the necessary standard such that its subsequent discharge will not affect the integrity of any European site.**

Please refer to Appendix B for a letter from Uisce Éireann confirming Wicklow WWTP will continue to meet the EPA discharge licence ELV upon receiving the flows and loads fr the connection of Ballynagran Landfill.

In accordance with Wicklow WWTP's most recent annual environmental reports (AER) 2022 and 2023 (refer to Appendix E), its current discharge is compliant with the ELV set in its wastewater discharge licence, D0012-01, with no exceedances reported in these years.

Comparing the permeate quality to the WWTP's current influents, from the 2022 and 2023 AERs, demonstrates that the quality of the permeate has lower COD, BOD, and SS than current influents into the WWTP, and the hydraulic load of the permeate is not significant. Refer to Figure 1.

	COD- Cr (mg/l)		Suspended Solids (mg/)l		BOD (5 days with carbonaceous inhibition) mg/l		Hydraulic Capacity m^3/day	
	Ballynagran Landfill Treated Permeate							
	Max	Mean	Max	Mean	Max	Mean	Max	Mean
	159	89	<10	<1 0	40	24.5	142	90
	Wicklow WWTP D0012-01 Influent Results							
AER 2024	Not available at the time ofw riting this report							
AER 2023	447	229	224	100	122	76	18117	8 423
AER 2022	637	315	430	150	359	141	17976	7307

Figure 1: Extract fromAA Screening

Uisce Éireann's online register confirms there is spare capaci tyat Wicklow WWTP ,Figure 2.

Region	County	Settlement	Wastewater Treatment Plant (WWTP)	Reg #	Indication of Available Capacity
EM	Wicklow	Bray	Shanganagh WWTP	D0038	• Gr een
EM	Wicklow	Greystones	Greystones WWTP	D0010	• Green
EM	Wicklow	Wicklow	Wicklow WWTP	D0012	• Green

Figure 2: Extract from Uisce Éireann Webste

Uisce Éireann have also completed a review of the Wicklow WWTP's capacity to treat the permeate and a connection agreement has been signed between Uisce Éireann and Ballynagran Landfill. The connection agreement is included in the original An Bord Pleanála submission and the confirmation email from Uisce Éireann that the counter signed agreement and fee have been paid is found in Appendix C.

The Wicklow WWTP EPA licence, ref. D0012-01, was subject to Technical Amendment D most recently on 02/12/2021 where the EPA completed a screening for Appropriate Assessment of the WWTP. The EPA determined an Appropriate Assessment of the activity was not required.

Given the quality of the permeate, available capacity in the WWTP, the technical assessment and agreement by Uisce Éireann to accept the wastewater for treatment and the EPA screening for appropriate assessment which was based on the capacity of the WWTP as constructed, it is considered that the treatment of this permeate by Wicklow WWTP would not have a significant impact on any European site.

4. An updated AA screening report which addresses the destination and treatment of e permeate

Please find the requested updated AA screening in Appendix D which addresses the destination and treatment of the permeate. It concludes;

"Following completion of a stage 1 Screening for Appropriate Assessment, it can be concluded that beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed project, individually or in combination with other plans and projects, would not be likely to have a significant effect on any European sites."

If you have any further queriers, please contact me on 0876160927 or email michelle.maclennan@fingleton.ie.

Kind Regards,

Michelle Mac Lennan

Michelle Mac Lennan

Appendix A: Permeate Test Results

FITZ SCIENTIFIC
MONITORING & TESTING

Unit 35,
Boyne Business Park,
Drogheda,
Co. Louth
Ireland
Tel: +353 41 9845440
Fax: +353 41 9846171
Web: www.fitzsci.ie
email: info@fitzsci.ie

A copy of this certificate is available on www.fitzsci.ie

Customer supplied information appear in italics.

Customer	*Damien Holmes*	*Lab Report Ref. No.*	0084/012/01
	Ballynagran Landfill Ltd	*Date of Receipt*	12/10/2021
	Coolbeg	*Sampled On*	*11/10/2021*
	Kilbride	*Date Testing Commenced*	12/10/2021
	Wicklow	*Received or Collected*	Delivered by Customer
Customer PO	*07648*	*Condition on Receipt*	Acceptable
Customer Ref	*RO 1*	*Date of Report*	20/10/2021
Ref 2	*11/10/21 4pm*	*Sample Type*	*Water*
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	51.7	mg/L as N	
Ammonia as NH3	119	Calculation	62.73	mg/L as NH3	
Ammonium as NH4	119	Calculation	66.42	mg/L as NH4	
Chloride	100	Colorimetry	33.0	mg/L	
COD	107	Colorimetry	41	mg/L	

Signed : A Harmon

Aoife Harmon - Laboratory Supervisor

Date : 20/10/2021

Acc. : Accredited Parameters by ISO/IEC 17025:2017
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2018)

Final results will be issued without any estimated uncertainty of measurement being applied. This can be supplied on request.
Fitz Scientific maintain all customer information in the strictest confidence which is legally enforceable.

FITZ SCIENTIFIC
MONITORING & TESTING

Unit 35,
Boyne Business Park,
Drogheda,
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Ireland
Tel: +353 41 9845440
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Web: www.fitzsci.ie
email: info@fitzsci.ie

A copy of this certificate is available on www.fitzsci.ie

Customer supplied information appear in italics.

Customer	*Damien Holmes* *Ballynagran Landfill Ltd* *Coolbeg* *Kilbride* *Wicklow*	*Lab Report Ref.No.*	0084/012/02
		Date of Receipt	12/10/2021
		Sampled On	*12/10/2021*
		Date Testing Commenced	12/10/2021
		Received or Collected	Delivered by Customer
		Condition on Receipt	Acceptable
Customer PO	*07648*	*Date of Report*	20/10/2021
Customer Ref	*RO 2*	*Sample Type*	*Water*
Ref 2	*12/10/21 11am*		
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	S OP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	61.6	mg/L as N	
Ammonia as NH3	119	Calculation	74.75	mg/L as NH3	
Ammonium as NH4	119	Calculation	79.15	mg/L as NH4	
Chloride	100	Colorimetry	35.4	mg/L	
COD	107	Colorimetry	46	mg/L	

Signed : A Harmon

Aoife Harmon - Laboratory Supervisor

Date : 20/10/2021

Acc. : Accredited Parameters by ISO/IEC 17025:2017
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2018)

Final results will be issued without any estimated uncertainty of measurement being applied. This can be supplied on request.
Fitz Scientific maintain all customer information in the strictest confidence which is legally enforceable.

element

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W: www.element.com

O'Callaghan Moran & Associates
Unit 15
Melbourne Business Park
Model Farm
Cork
Ireland

Attention :	Neil Sandes
Date :	28th September, 2021
Your reference :	21-211-02
Our reference :	Test Report 21/14364 Batch 1
Location :	Ballynagran Landfill Limited
Date samples received :	16th September, 2021
Status :	Interim report
Issue :	1

One sample was received for analysis on 16th September, 2021 and was scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Element Materials Technology

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

EMT Sample No.	1-11												
Sample ID	RO PERMATE												
Depth													
COC No / misc													
Containers	V H HN Z P BOD G												
Sample Date	15/09/2021 11:00												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	16/09/2021												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Dissolved Antimony	<2										<2	ug/l	TM30/PM14
Dissolved Arsenic	<2.5										<2.5	ug/l	TM30/PM14
Dissolved Barium	<3										<3	ug/l	TM30/PM14
Dissolved Beryllium	<0.5										<0.5	ug/l	TM30/PM14
Dissolved Boron	2435										<12	ug/l	TM30/PM14
Dissolved Cadmium	<0.5										<0.5	ug/l	TM30/PM14
Total Dissolved Chromium	<1.5										<1.5	ug/l	TM30/PM14
Dissolved Cobalt	<2										<2	ug/l	TM30/PM14
Dissolved Copper	<7										<7	ug/l	TM30/PM14
Dissolved Lead	<5										<5	ug/l	TM30/PM14
Dissolved Mercury	<1										<1	ug/l	TM30/PM14
Dissolved Molybdenum	<2										<2	ug/l	TM30/PM14
Dissolved Nickel	<2										<2	ug/l	TM30/PM14
Dissolved Selenium	<3										<3	ug/l	TM30/PM14
Dissolved Silver	<5										<5	ug/l	TM30/PM14
Dissolved Tellurium	<5										<5	ug/l	TM30/PM14
Dissolved Thallium	<3										<3	ug/l	TM30/PM14
Dissolved Tin	<5										<5	ug/l	TM30/PM14
Dissolved Titanium	<5										<5	ug/l	TM30/PM14
Dissolved Uranium	<5										<5	ug/l	TM30/PM14
Dissolved Vanadium	<1.5										<1.5	ug/l	TM30/PM14
Dissolved Zinc	<3										<3	ug/l	TM30/PM14
Total Antimony	<2										<2	ug/l	TM30/PM14
Total Arsenic	<2.5										<2.5	ug/l	TM30/PM14
Total Barium	<3										<3	ug/l	TM30/PM14
Total Beryllium	<0.5										<0.5	ug/l	TM30/PM14
Total Boron	2225										<12	ug/l	TM30/PM14
Total Cadmium	<0.5										<0.5	ug/l	TM30/PM14
Total Chromium	<1.5										<1.5	ug/l	TM30/PM14
Total Cobalt	<2										<2	ug/l	TM30/PM14
Total Copper	<7										<7	ug/l	TM30/PM14
Total Lead	<5										<5	ug/l	TM30/PM14
Total Mercury	<1										<1	ug/l	TM30/PM14
Total Molybdenum	<2										<2	ug/l	TM30/PM14
Total Nickel	<2										<2	ug/l	TM30/PM14
Total Phosphorus	41										<5	ug/l	TM30/PM14
Total Selenium	<3										<3	ug/l	TM30/PM14
Total Silver	<5										<5	ug/l	TM30/PM14
Total Tellurium	<5										<5	ug/l	TM30/PM14
Total Thallium	<3										<3	ug/l	TM30/PM14
Total Tin	<5										<5	ug/l	TM30/PM14
Total Titanium	<5										<5	ug/l	TM30/PM14
Total Uranium	<5										<5	ug/l	TM30/PM14
Total Vanadium	<1.5										<1.5	ug/l	TM30/PM14

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-11												
Sample ID	RO PERMATE												
Depth													
COC No / misc													
Containers	V H HN Z P BOD G												
Sample Date	15/09/2021 11:00												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	16/09/2021												
												LOD/LOR	Units	Method No.
Total Zinc	<3											<3	ug/l	TM30/PM14
PAH MS														
Naphthalene	<2.0$_{AB}$											<0.1	ug/l	TM4/PM30
Acenaphthylene	<0.260$_{AB}$											<0.013	ug/l	TM4/PM30
Acenaphthene	<0.260$_{AB}$											<0.013	ug/l	TM4/PM30
Fluorene	<0.280$_{AB}$											<0.014	ug/l	TM4/PM30
Phenanthrene	<0.220$_{AB}$											<0.011	ug/l	TM4/PM30
Anthracene	<0.260$_{AB}$											<0.013	ug/l	TM4/PM30
Fluoranthene	<0.240$_{AB}$											<0.012	ug/l	TM4/PM30
Pyrene	<0.260$_{AB}$											<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	<0.300$_{AB}$											<0.015	ug/l	TM4/PM30
Chrysene	<0.220$_{AB}$											<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	<0.360$_{AB}$											<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	<0.320$_{AB}$											<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	<0.220$_{AB}$											<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.20$_{AB}$											<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	<0.220$_{AB}$											<0.011	ug/l	TM4/PM30
PAH 16 Total	<3.900$_{AB}$											<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.20$_{AB}$											<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.20$_{AB}$											<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	100$_{AB}$											<0	%	TM4/PM30
VOC TICs	ND												None	TM15/PM10
SVOC TICs	See Attached												None	TM16/PM30

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
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Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-11										LOD/LOR	Units	Method No.
Sample ID	RO PERMATE												
Depth													
COC No / misc													
Containers	V H HN Z P BOD G												
Sample Date	15/09/2021 11:00												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	16/09/2021												
Pesticides													
Organochlorine Pesticides													
Aldrin	<0.01										<0.01	ug/l	TM149/PM30
Alpha-HCH (BHC)	<0.01										<0.01	ug/l	TM149/PM30
Beta-HCH (BHC)	<0.01										<0.01	ug/l	TM149/PM30
Chlorothalonil	<2.50 AC										<0.01	ug/l	TM149/PM30
cis-Chlordane	<0.01										<0.01	ug/l	TM149/PM30
Delta-HCH (BHC)	<0.01										<0.01	ug/l	TM149/PM30
Dieldrin	<0.01										<0.01	ug/l	TM149/PM30
Endosulphan I	<0.01										<0.01	ug/l	TM149/PM30
Endosulphan II	<0.01										<0.01	ug/l	TM149/PM30
Endosulphan sulphate	<0.01										<0.01	ug/l	TM149/PM30
Endrin	<0.01										<0.01	ug/l	TM149/PM30
Gamma-HCH (BHC)	<0.01										<0.01	ug/l	TM149/PM30
Heptachlor	<0.01										<0.01	ug/l	TM149/PM30
Heptachlor Epoxide	<0.01										<0.01	ug/l	TM149/PM30
Hexachlorobenzene	<0.01										<0.01	ug/l	TM149/PM30
Isodrin	<0.01										<0.01	ug/l	TM149/PM30
o,p'-DDE	<0.01										<0.01	ug/l	TM149/PM30
o,p'-DDT	<0.01										<0.01	ug/l	TM149/PM30
o,p'-Methoxychlor	<0.01										<0.01	ug/l	TM149/PM30
o,p'-TDE	<0.01										<0.01	ug/l	TM149/PM30
p,p'-DDE	<0.01										<0.01	ug/l	TM149/PM30
p,p'-DDT	<0.01										<0.01	ug/l	TM149/PM30
p,p'-Methoxychlor	<0.01										<0.01	ug/l	TM149/PM30
p,p'-TDE	<0.01										<0.01	ug/l	TM149/PM30
Pendimethalin	<0.01										<0.01	ug/l	TM149/PM30
Permethrin I	<0.01										<0.01	ug/l	TM149/PM30
Permethrin II	<0.01										<0.01	ug/l	TM149/PM30
Quintozene (PCNB)	<0.01										<0.01	ug/l	TM149/PM30
Tecnazene	<0.01										<0.01	ug/l	TM149/PM30
Telodrin	<0.01										<0.01	ug/l	TM149/PM30
trans-Chlordane	<0.01										<0.01	ug/l	TM149/PM30
Triadimefon	<0.01										<0.01	ug/l	TM149/PM30
Triallate	<0.01										<0.01	ug/l	TM149/PM30
Trifluralin	<0.01										<0.01	ug/l	TM149/PM30

Element Materials Technology

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-11											LOD/LOR	Units	Method No.
Sample ID	RO PERMATE													
Depth														
COC No / misc														
Containers	V H HN Z P BOD G													
Sample Date	15/09/2021 11:00													
Sample Type	Liquid													
Batch Number	1													
Date of Receipt	16/09/2021													
Pesticides														
Organophosphorus Pesticides														
Azinphos ethyl	<0.01											<0.01	ug/l	TM149/PM30
Azinphos methyl	<0.01											<0.01	ug/l	TM149/PM30
Carbophenothion	<0.01											<0.01	ug/l	TM149/PM30
Chlorfenvinphos	<0.01											<0.01	ug/l	TM149/PM30
Chlorpyrifos	<0.01											<0.01	ug/l	TM149/PM30
Chlorpyrifos-methyl	<0.01											<0.01	ug/l	TM149/PM30
Diazinon	<0.01											<0.01	ug/l	TM149/PM30
Dichlorvos	<0.01											<0.01	ug/l	TM149/PM30
Disulfoton	<0.01											<0.01	ug/l	TM149/PM30
Dimethoate	<0.01											<0.01	ug/l	TM149/PM30
Ethion	<0.01											<0.01	ug/l	TM149/PM30
Ethyl Parathion (Parathion)	<0.01											<0.01	ug/l	TM149/PM30
Etrimphos	<0.01											<0.01	ug/l	TM149/PM30
Fenitrothion	<0.01											<0.01	ug/l	TM149/PM30
Fenthion	<0.01											<0.01	ug/l	TM149/PM30
Malathion	<0.01											<0.01	ug/l	TM149/PM30
Methyl Parathion	<0.01											<0.01	ug/l	TM149/PM30
Mevinphos	<0.01											<0.01	ug/l	TM149/PM30
Phosalone	<0.01											<0.01	ug/l	TM149/PM30
Pirimiphos Methyl	<0.01											<0.01	ug/l	TM149/PM30
Propetamphos	<0.01											<0.01	ug/l	TM149/PM30
Triazophos	<0.01											<0.01	ug/l	TM149/PM30

All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-11	LOD/LOR	Units	Method No.
Sample ID	RO PERMATE			
Depth				
COC No / misc				
Containers	V H HN Z P BOD G			
Sample Date	15/09/2021 11:00			
Sample Type	Liquid			
Batch Number	1			
Date of Receipt	16/09/2021			
Acid Herbicides				
Benazolin	<0.1	<0.1	ug/l	TM42/PM30
Bentazone	<0.1	<0.1	ug/l	TM42/PM30
Bromoxynil	<0.1	<0.1	ug/l	TM42/PM30
Clopyralid	<0.1	<0.1	ug/l	TM42/PM30
4-CPA	<0.1	<0.1	ug/l	TM42/PM30
2,4-D	<0.1	<0.1	ug/l	TM42/PM30
2,4-DB	<0.1	<0.1	ug/l	TM42/PM30
Dicamba	<0.1	<0.1	ug/l	TM42/PM30
Dichloroprop	<0.1	<0.1	ug/l	TM42/PM30
Diclofop	<0.1	<0.1	ug/l	TM42/PM30
Fenoprop	<0.1	<0.1	ug/l	TM42/PM30
Flamprop	<0.1	<0.1	ug/l	TM42/PM30
Flamprop-isopropyl	<0.1	<0.1	ug/l	TM42/PM30
Ioxynil	<0.1	<0.1	ug/l	TM42/PM30
MCPA	<0.1	<0.1	ug/l	TM42/PM30
MCPB	<0.1	<0.1	ug/l	TM42/PM30
Mecoprop	<0.1	<0.1	ug/l	TM42/PM30
Picloram	<0.1	<0.1	ug/l	TM42/PM30
Pentachlorophenol	<0.1	<0.1	ug/l	TM42/PM30
2,4,5-T	<0.1	<0.1	ug/l	TM42/PM30
2,3,6-TBA	<0.1	<0.1	ug/l	TM42/PM30
Triclopyr	<0.1	<0.1	ug/l	TM42/PM30
Mineral Oil (C10-C40)	<200$_{AB}$	<10	ug/l	TM5/PM16/PM30
PCB 28	<0.1	<0.1	ug/l	TM17/PM30
PCB 52	<0.1	<0.1	ug/l	TM17/PM30
PCB 101	<0.1	<0.1	ug/l	TM17/PM30
PCB 118	<0.1	<0.1	ug/l	TM17/PM30
PCB 138	<0.1	<0.1	ug/l	TM17/PM30
PCB 153	<0.1	<0.1	ug/l	TM17/PM30
PCB 180	<0.1	<0.1	ug/l	TM17/PM30
Total 7 PCBs	<0.7	<0.7	ug/l	TM17/PM30
Total Phenols HPLC	<0.15	<0.15	mg/l	TM26/PM0
Fluoride	<0.3	<0.3	mg/l	TM173/PM0
Sulphate as SO4	32.3	<0.5	mg/l	TM38/PM0
Chloride	58.8	<0.3	mg/l	TM38/PM0
Nitrate as NO3	<0.2	<0.2	mg/l	TM38/PM0
Ortho Phosphate as PO4	<0.06	<0.06	mg/l	TM38/PM0

All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=HNO_3

EMT Sample No.	1-11												
Sample ID	RO PERMATE												
Depth													
COC No / misc													
Containers	V H HN Z P BOD G												
Sample Date	15/09/2021 11:00												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	16/09/2021												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Total Cyanide	<0.10$_{AA}$										<0.01	mg/l	TM89/PM0
Ammoniacal Nitrogen as N	62.59										<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as NH3	76.09										<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as NH4	80.60										<0.03	mg/l	TM38/PM0
Dissolved Methane	>>1214										<1	ug/l	TM25/PM0
Dibutyltin	<0.1										<0.1	ug/l	TM94/PM48
Tributyltin	<0.1										<0.1	ug/l	TM94/PM48
Triphenyltin	<0.1										<0.1	ug/l	TM94/PM48
Sulphide	<0.01										<0.01	mg/l	TM107/PM0
Anionic Surfactants	1.4										<0.2	mg/l	TM33/PM0
BOD (Settled)	40										<1	mg/l	TM58/PM0
cBOD (Settled)	69										<1	mg/l	TM58/PM0
COD (Settled)	100										<7	mg/l	TM57/PM0
COD (Shaken)	111										<7	mg/l	TM57/PM0
Electrical Conductivity @25C	1376										<2	uS/cm	TM76/PM0
Fats Oils and Grease	9										<4	mg/l	TM187/PM30
Free/Residual Chlorine	<0.02										<0.02	mg/l	TM66/PM0
Settleable Solids	<2										<2	ml/l	TM67/PM0
Silica	NDP										<0.01	mg/l	TM52/PM0
Total Dissolved Solids	616										<35	mg/l	TM20/PM0
Total Nitrogen	63.2										<0.5	mg/l	TM38/TM125/PM0
Total Suspended Solids	<10										<10	mg/l	TM37/PM0
Mass of Total Solids incl. Microplastics (Water)*	< 0.001										< 0.001	g	Subcontracted
Mass of Microplastics (Water)*	< 0.001										< 0.001	g	Subcontracted

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

SVOC Report : Liquid

EMT Sample No.	1-11													
Sample ID	RO PERMATE													
Depth														
COC No / misc														
Containers	V H HN Z P 500 G													
Sample Date	15/09/2021 11:00													
Sample Type	Liquid													
Batch Number	1													
Date of Receipt	16/09/2021													

Please see attached notes for all abbreviations and acronyms

		LOD/LOR	Units	Method No.
SVOC MS				
Phenols				
2-Chlorophenol	<1	<1	ug/l	TM16/PM30
2-Methylphenol	1.8	<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	ug/l	TM16/PM30
4-Methylphenol	28	<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	ug/l	TM16/PM30
Phenol	21	<1	ug/l	TM16/PM30
PAHs				
2-Chloronaphthalene	<1	<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	ug/l	TM16/PM30
Phthalates				
Bis(2-ethylhexyl) phthalate	<5	<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	ug/l	TM16/PM30
Other SVOCs				
1,2-Dichlorobenzene	<1	<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	ug/l	TM16/PM30
Carbazole	<0.5	<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5+	<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	ug/l	TM16/PM30
Surrogate Recovery 2-Fluorobiphenyl	125	<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	129	<0	%	TM16/PM30

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes
EMT Job No: 21/14364

VOC Report : Liquid

EMT Sample No.	1-11												
Sample ID	RO PERMATE												
Depth													
COC No / misc													
Containers	V H HN Z P BOD G												
Sample Date	15/09/2021 11:00												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	16/09/2021												

Please see attached notes for all abbreviations and acronyms

		LOD/LOR	Units	Method No.
VOC MS				
Dichlorodifluoromethane	<2	<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether	<0.1	<0.1	ug/l	TM15/PM10
Chloromethane	<3	<3	ug/l	TM15/PM10
Vinyl Chloride	<0.1	<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	ug/l	TM15/PM10
Chloroethane	<3	<3	ug/l	TM15/PM10
Trichlorofluoromethane	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE)	<3	<3	ug/l	TM15/PM10
Dichloromethane (DCM)	<3	<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethane	<3	<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene	<3	<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	ug/l	TM15/PM10
Bromochloromethane	<2	<2	ug/l	TM15/PM10
Chloroform	<2	<2	ug/l	TM15/PM10
1,1,1-Trichloroethane	<2	<2	ug/l	TM15/PM10
1,1-Dichloropropene	<3	<3	ug/l	TM15/PM10
Carbon tetrachloride	<2	<2	ug/l	TM15/PM10
1,2-Dichloroethane	<2	<2	ug/l	TM15/PM10
Benzene	<0.5	<0.5	ug/l	TM15/PM10
Trichloroethene (TCE)	<3	<3	ug/l	TM15/PM10
1,2-Dichloropropane	<2	<2	ug/l	TM15/PM10
Dibromomethane	<3	<3	ug/l	TM15/PM10
Bromodichloromethane	<2	<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	ug/l	TM15/PM10
Toluene	<5	<5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	ug/l	TM15/PM10
1,1,2-Trichloroethane	<2	<2	ug/l	TM15/PM10
Tetrachloroethene (PCE)	<3	<3	ug/l	TM15/PM10
1,3-Dichloropropane	<2	<2	ug/l	TM15/PM10
Dibromochloromethane	<2	<2	ug/l	TM15/PM10
1,2-Dibromoethane	<2	<2	ug/l	TM15/PM10
Chlorobenzene	<2	<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane	<2	<2	ug/l	TM15/PM10
Ethylbenzene	<1	<1	ug/l	TM15/PM10
m/p-Xylene	<2	<2	ug/l	TM15/PM10
o-Xylene	<1	<1	ug/l	TM15/PM10
Styrene	<2	<2	ug/l	TM15/PM10
Bromoform	<2	<2	ug/l	TM15/PM10
Isopropylbenzene	<3	<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	ug/l	TM15/PM10
Bromobenzene	<2	<2	ug/l	TM15/PM10
1,2,3-Trichloropropane	<3	<3	ug/l	TM15/PM10
Propylbenzene	<3	<3	ug/l	TM15/PM10
2-Chlorotoluene	<3	<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene	<3	<3	ug/l	TM15/PM10
4-Chlorotoluene	<3	<3	ug/l	TM15/PM10
tert-Butylbenzene	<3	<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene	<3	<3	ug/l	TM15/PM10
sec-Butylbenzene	<3	<3	ug/l	TM15/PM10
4-Isopropyltoluene	<3	<3	ug/l	TM15/PM10
1,3-Dichlorobenzene	<3	<3	ug/l	TM15/PM10
1,4-Dichlorobenzene	<3	<3	ug/l	TM15/PM10
n-Butylbenzene	<3	<3	ug/l	TM15/PM10
1,2-Dichlorobenzene	<3	<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<3	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<2	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	ug/l	TM15/PM10
Naphthalene	<2	<3	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<2	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	101	<3	ug/l	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	97	<0	%	TM15/PM10
		<0	%	TM15/PM10

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 21/14364 **Method:** SVOC
Sample number: 11 **Matrix:** Liquid
Sample identity: RO PERMATE
Sample depth:
Sample Type: Liquid
Units: ug/l

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
57-10-3	n-Hexadecanoic acid	11.199	99	129
60-33-3	9,12-Octadecadienoic acid (Z,Z)-	11.927	98	124
112-80-1	Oleic Acid	11.961	99	312

Client Name: O'Callaghan Moran & Associates
Reference: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes

Matrix : Liquid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
21/14364	1	RO PERMATE		1-11	TM52/PM0	Sample contains compounds that interfere with this test

Client Name: O'Callaghan Moran & Associates
Refer e: 21-211-02
Location: Ballynagran Landfill Limited
Contact: Neil Sandes

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/14364						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/14364

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

AB	x20 Dilution
AC	x250 Dilution

HWOL ACRONYMS AND OPERATORS USED

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics mathematically subtracted
#2	EU_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

EMT No: 21/14364

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16/PM30	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE/Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.				
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.				
TM25	Determintaion of Dissolved Methane, Ethane and Ethene by Headspace GC-FID	PM0	No preparation is required.				
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM33	Determination of Anionic surfactants by reaction with Methylene Blue to form complexes which are analysed spectrophotometrically. (MBAS)	PM0	No preparation is required.				

EMT Job No: 21/14364

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM37	Modified methods - TSS: USEPA 160.2 (1985), EN872:2005 and APHA SMEWW 2540D:1999 22nd Edition; VSS: USEPA 1684 (Jan 2001), USEPA 160.4 (1971) and SMEWW 2540E:1999 22nd Edition. Gravimetric determination of Total Suspended Solids (TSS) and Volatile Suspended Solids (VSS). Sample is filtered through a 1.5um pore size glass fibre filter and the resulting residue is dried and weighed at 105°C for TSS and 550°C for VSS.	PM0	No preparation is required.				
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM0	No preparation is required.				
TM38/TM125	Total Nitogen/Organic Nitrogen by calculation	PM0	No preparation is required.				
TM42	Modified US EPA method 8270D v5:2014. Pesticides and herbicides by GC-MS	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM52	Silica determination by reaction with Amino Acid F Reagent, Citric acid and Molybdate Reagent which is analysed spectrophotometrically.	PM0	No preparation is required.				
TM57	Modified US EPA Method 410.4. (Rev. 2.0 1993) Comparable with ISO 15705:2002. Chemical Oxygen Demand is determined by hot digestion with Potassium Dichromate and measured spectrophotometerically.	PM0	No preparation is required.				
TM58	APHA SMEWW 5210B:1999 22nd Edition. Comparible with ISO 5815:1989. Measurement of Biochemical Oxygen Demand. When cBOD (Carbonaceous BOD) is requested a nitrification inhibitor is added which prevents the oxidation of reduced forms of nitrogen, such as am	PM0	No preparation is required.				
TM66	Determination of Free Chlorine which reacts with DPD (N,N-diethyl-p-phenylenediamine) reagent and measured spectrophotometrically.	PM0	No preparation is required.				
TM67	Modified US EPA method 160.5 (1974). Volumetric analysis of settleable solids in water using an Imhoff Cone.	PM0	No preparation is required.				
176	Modified US EPA method 120.1 (1982). Determination of Specific Conductance by Metrohm automated probe analyser.	PM0	No preparation is required.				

EMT Job No: 21/14364

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.				
TM94	Derivatisation and extraction of Organotins. Analysis by GC-MS	PM48	Samples are pretreated and derivatised. The derviatised organotins are then extracted using hexane.				
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM0	No preparation is required.				
TM149	Determination of Pesticides by Large Volume Injection on GC Triple Quad MS, based upon USEPA method 8270D v5:2014	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.				
TM187	Hexane extractable oil and grease in Waters is determined by IR detection at absorbance 2940cm-1 using calibrated InfraCal 2, ATR-SP	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				

Chemtest
The right chemistry to deliver results

Results - Water

Project: 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates			Chemtest Job No.:		20-09440	20-09440
Quotation No.: Q20-19673			Chemtest Sample ID.:		992177	992178
			Sample Location:		T104-Conc	T103-Perm
			Sample Type:		WATER	WATER
			Date Sampled:		23-Mar-2020	23-Mar-2020
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Dioxins (Subcon)	S			N/A	See Attached	See Attached
Furans (Subcon)	S			N/A	See Attached	See Attached
Isodrin	N	1790	µg/l	1.5	< 1.5	< 1.5
Diuron	N	1830	mg/l	1.0	< 1.0	< 1.0
Isoproturon	N	1830	mg/l	1.0	< 1.0	< 1.0
Linuron	N	1830	mg/l	1.0	< 1.0	< 1.0
pH	U	1010		N/A	8.1	8.2
Electrical Conductivity	U	1020	µS/cm	1.0	16000	870
Suspended Solids At 105C	U	1030	mg/l	5.0	270	< 5.0
Total Dissolved Solids	N	1020	mg/l	1.0	10000	570
Biochemical Oxygen Demand	N	1090	mg O2/l	4.0	[B] 520	[B] 6.0
Chemical Oxygen Demand	U	1100	mg O2/l	10	4400	31
Alkalinity (Total)	U	1220	mg/l	10	6900	42
Chloride	U	1220	mg/l	1.0	1300	46
Fluoride	U	1220	mg/l	0.050	2.6	0.17
Ammonia (Free)	U	1220	mg/l	0.050	77	1.3
Phosphorus (Total)	N	1220	mg/l	0.020	5.0	0.053
Sulphate	U	1220	mg/l	1.0	1000	25
Total Oxidised Nitrogen	U	1220	mg/l	0.20	< 0.20	< 0.20
Calcium	U	1415	mg/l	5.0	200	29
Total Hardness as CaCO3	U	1270	mg/l	15	980	130
Arsenic (Dissolved)	U	1450	µg/l	1.0	250	2.2
Boron (Dissolved)	U	1450	µg/l	20	7000	130
Barium (Dissolved)	U	1450	µg/l	5.0	300	< 5.0
Beryllium (Dissolved)	U	1450	µg/l	1.0	1.8	< 1.0
Cadmium (Dissolved)	U	1450	µg/l	0.080	1.1	< 0.080
Cobalt (Dissolved)	U	1450	µg/l	1.0	22	< 1.0
Chromium (Dissolved)	U	1450	µg/l	1.0	340	2.0
Copper (Dissolved)	U	1450	µg/l	1.0	9.5	2.1
Mercury (Dissolved)	U	1450	µg/l	0.50	16	2.0
Manganese (Dissolved)	U	1450	µg/l	1.0	770	5.8
Molybdenum (Dissolved)	U	1450	µg/l	1.0	3.5	< 1.0
Nickel (Dissolved)	U	1450	µg/l	1.0	200	1.5
Lead (Dissolved)	U	1450	µg/l	1.0	1.0	< 1.0
Antimony (Dissolved)	U	1450	µg/l	1.0	72	< 1.0
Seleni 'Dissolved)	U	1450	µg/l	1.0	69	< 1.0
Tin (Dissolved)	U	1450	µg/l	1.0	12	< 1.0
Vanadium (Dissolved)	U	1450	µg/l	1.0	200	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	130	21
Total Organic Carbon	U	1610	mg/l	2.0	1500	210

Chemtest
The right chemistry to deliver results

Results - Water

Project: 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates		Chemtest Job No..			20-09440	20-09440
Quotation No. Q20-19673		Chemtest Sample ID.:			992177	992178
		Sample Location:			T104-Conc	T103-Perm
		Sample Type:			WATER	WATER
		Date Sampled:			23-Mar-2020	23-Mar-2020
Determinand	Accred.	SOP	Units	LOD		
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	15	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	15	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	28	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	370	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	98	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	31	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	530	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	540	< 10
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10
Chrysene	N	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10
Total Of 16 PAH's	N	1700	µg/l	2.0	< 2.0	< 2.0
Organotin (total as TBTO)	N	1730	µg/l	0.050	< 0.050	< 0.050
Dibutyl Tin	N	1730	µg/l	0.050	< 0.050	< 0.050
Tetrabutyl Tin	N	1730	µg/l	0.0010	< 0.0010	< 0.0010
Tributyl Tin	N	1730	µg/l	0.0500	< 0.050	< 0.050

Results - Water

Project: 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates			Chemtest Job No.:		20-09440	20-09440
Quotation No.: Q20-19673			Chemtest Sample ID.:		992177	992178
			Sample Location:		T104-Conc	T103-Perm
			Sample Type:		WATER	WATER
			Date Sampled:		23-Mar-2020	23-Mar-2020
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Triphenyl Tin	N	1730	µg/l	0.050	< 0.050	< 0.050
Monobutyl Tin	N	1730	µg/l	0.050	< 0.050	< 0.050
Dichlorodifluoromethane	U	1760	µg/l	1.0	< 1.0	< 1.0
Chloromethane	U	1760	µg/l	1.0	< 1.0	< 1.0
Vinyl Chloride	N	1760	µg/l	1.0	< 1.0	< 1.0
Bromomethane	U	1760	µg/l	5.0	< 5.0	< 5.0
Chloroethane	U	1760	µg/l	2.0	< 2.0	< 2.0
Trichlorofluoromethane	U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0
Dichloromethane	N	1760	µg/l	20	< 20	< 20
Trans 1,2-Dichloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethane	U	1760	µg/l	1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0
Bromochloromethane	U	1760	µg/l	5.0	< 5.0	< 5.0
Trichloromethane	U	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	U	1760	µg/l	1.0	< 1.0	< 1.0
Tetrachloromethane	U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloropropene	U	1760	µg/l	1.0	< 1.0	< 1.0
Benzene	U	1760	µg/l	1.0	1.5	< 1.0
1,2-Dichloroethane	U	1760	µg/l	2.0	< 2.0	< 2.0
Trichloroethene	N	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloropropane	U	1760	µg/l	1.0	< 1.0	< 1.0
Dibromomethane	U	1760	µg/l	10	< 10	< 10
Bromodichloromethane	U	1760	µg/l	5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	1760	µg/l	10	< 10	< 10
Toluene	U	1760	µg/l	1.0	8.6	< 1.0
Trans-1,3-Dichloropropene	N	1760	µg/l	10	< 10	< 10
1,1,2-Trichloroethane	U	1760	µg/l	10	< 10	< 10
Tetrachloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichloropropane	U	1760	µg/l	2.0	< 2.0	< 2.0
Dibromochloromethane	U	1760	µg/l	10	< 10	< 10
1,2-Dibromoethane	U	1760	µg/l	5.0	< 5.0	< 5.0
Chlorobenzene	N	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	U	1760	µg/l	2.0	< 2.0	< 2.0
Ethylbenzene	U	1760	µg/l	1.0	3.1	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	5.5	< 1.0
o-Xylene	U	1760	µg/l	1.0	3.9	< 1.0
Styrene	U	1760	µg/l	1.0	< 1.0	< 1.0
Tribromomethane	U	1760	µg/l	1.0	< 1.0	< 1.0
Isopropylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0

Results - Water

Project: 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates					Chemtest Job No.:	20-09440	20-09440
Quotation: Q20-19673					Chemtest Sample ID.:	992177	992178
					Sample Location:	T104-Conc	T103-Perm
					Sample Type:	WATER	WATER
					Date Sampled:	23-Mar-2020	23-Mar-2020
Determinand	Accred.	SOP	Units	LOD			
Bromobenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,2,3-Trichloropropane	N	1760	µg/l	50		< 50	< 50
N-Propylbenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
2-Chlorotoluene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,3,5-Trimethylbenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
4-Chlorotoluene	U	1760	µg/l	1.0		< 1.0	< 1.0
Tert-Butylbenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,2,4-Trimethylbenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
Sec-Butylbenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,3-Dichlorobenzene	N	1760	µg/l	1.0		< 1.0	< 1.0
4-Isopropyltoluene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,4-Dichlorobenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
N-Butylbenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,2-Dichlorobenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	1760	µg/l	50		< 50	< 50
1,2,4-Trichlorobenzene	U	1760	µg/l	1.0		< 1.0	< 1.0
Hexachlorobutadiene	U	1760	µg/l	1.0		< 1.0	< 1.0
1,2,3-Trichlorobenzene	U	1760	µg/l	2.0		< 2.0	< 2.0
Methyl Tert-Butyl Ether	N	1760	µg/l	1.0		< 1.0	< 1.0
Carbon Tetrachloride	N	1760	µg/l	10		< 10	< 10
N-Nitrosodimethylamine	N	1790	µg/l	0.50		< 0.50	< 0.50
Phenol	N	1790	µg/l	0.50		< 0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50		< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50		< 0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50		< 0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50		< 0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50		< 0.50	< 0.50
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50		< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50		< 0.50	< 0.50
Hexachloroethane	N	1790	µg/l	0.50		< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50		< 0.50	< 0.50
4-Methylphenol	N	1790	µg/l	0.50		< 0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50		4.9	< 0.50
Isophorone	N	1790	µg/l	0.50		1.9	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50		23	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50		< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50		8.6	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50		< 0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50		< 0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50		< 0.50	< 0.50

Chemtest
The right chemistry to deliver results

Results - Water

Project: 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates			Chemtest Job No.:		20-09440	20-09440
Quotation No.: Q20-19673			Chemtest Sample ID.:		992177	992178
			Sample Location:		T104-Conc	T103-Perm
			Sample Type:		WATER	WATER
			Date Sampled:		23-Mar-2020	23-Mar-2020
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Phenanthrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50
Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N- Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project. 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates		Chemtest Job No..			20-09440	20-09440
Quotation No: Q20-19673		Chemtest Sample ID.:			992177	992178
		Sample Location:			T104-Conc	T103-Perm
		Sample Type:			WATER	WATER
		Date Sampled:			23-Mar-2020	23-Mar-2020
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
PCB 28	U	1815	µg/l	0.010	< 0.010	< 0.010
PCB 52	U	1815	µg/l	0.010	< 0.010	< 0.010
PCB 90+101	U	1815	µg/l	0.010	< 0.010	< 0.010
PCB 118	U	1815	µg/l	0.010	< 0.010	< 0.010
PCB 153	U	1815	µg/l	0.010	< 0.010	< 0.010
PCB 138	U	1815	µg/l	0.010	< 0.010	< 0.010
PCB 180	U	1815	µg/l	0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010
Demeton-O	N	1820	µg/l	0.20	< 0.20	< 0.20
Phorate	N	1820	µg/l	0.20	< 0.20	< 0.20
Demeton-S	N	1820	µg/l	0.20	< 0.20	< 0.20
Disulfoton	N	1820	µg/l	0.20	< 0.20	< 0.20
Fenthion	N	1820	µg/l	0.20	< 0.20	< 0.20
Trichloronate	N	1820	µg/l	0.20	< 0.20	< 0.20
Prothiofos	N	1820	µg/l	0.20	< 0.20	< 0.20
Fensulphothion	N	1820	µg/l	0.20	< 0.20	< 0.20
Sulprofos	N	1820	µg/l	0.20	< 0.20	< 0.20
Azinphos-Methyl	N	1820	µg/l	0.20	< 0.20	< 0.20
Coumaphos	N	1820	µg/l	0.20	< 0.20	< 0.20
Atraton	N	1830	µg/l	0.20	< 0.20	< 0.20
Simazine	N	1830	µg/l	0.20	< 0.20	< 0.20
Atrazine	N	1830	µg/l	0.20	< 0.20	< 0.20
Alpha-HCH	N	1840	µg/l	0.20	< 0.20	< 0.20
Gamma-HCH (Lindane)	N	1840	µg/l	0.20	< 0.20	< 0.20
Beta-HCH	N	1840	µg/l	0.20	< 0.20	< 0.20
Delta-HCH	N	1840	µg/l	0.20	< 0.20	< 0.20
Heptachlor	N	1840	µg/l	0.20	< 0.20	< 0.20
Aldrin	N	1840	µg/l	0.20	< 0.20	< 0.20
Heptachlor Epoxide	N	1840	µg/l	0.20	< 0.20	< 0.20
Gamma-Chlordane	N	1840	µg/l	0.20	< 0.20	< 0.20
Alpha-Chlordane	N	1840	µg/l	0.20	< 0.20	< 0.20
Endosulfan I	N	1840	µg/l	0.20	< 0.20	< 0.20
4,4-DDE	N	1840	µg/l	0.20	< 0.20	< 0.20
Dieldrin	N	1840	µg/l	0.20	< 0.20	< 0.20
Endrin	N	1840	µg/l	0.20	< 0.20	< 0.20
4,4-DDD	N	1840	µg/l	0.20	< 0.20	< 0.20
Endosulfan II	N	1840	µg/l	0.20	< 0.20	< 0.20

Chemtest
The right chemistry to deliver results

Results - Water

Project: 20-211-02 BNG Leachate

Client: O Callaghan Moran & Associates			Chemtest Job No.:		20-09440	20-09440
Quotation No.: Q20-19673			Chemtest Sample ID.:		992177	992178
			Sample Location:		T104-Conc	T103-Perm
			Sample Type:		WATER	WATER
			Date Sampled:		23-Mar-2020	23-Mar-2020
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Endrin Aldehyde	N	1840	µg/l	0.20	< 0.20	< 0.20
4,4-DDT	N	1840	µg/l	0.20	< 0.20	< 0.20
Dichlobenil	N	1840	µg/l	2.0	< 2.0	< 2.0
Endosulfan Sulphate	N	1840	µg/l	0.20	< 0.20	< 0.20
Methoxychlor	N	1840	µg/l	0.20	< 0.20	< 0.20
Endrin Ketone	N	1840	µg/l	0.20	< 0.20	< 0.20
2,4-D	N	1930	µg/l	0.50	< 0.50	< 0.50
Dichlorprop	N	1930	µg/l	0.010	< 0.010	< 0.010
MCPA	N	1930	µg/l	0.50	< 0.50	< 0.50
MCPB	N	1930	µg/l	0.50	< 0.50	< 0.50
Mecoprop	N	1930	µg/l	0.40	< 0.40	< 0.40
2,4,5-T	N	1930	µg/l	0.50	< 0.50	< 0.50
Phenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2-Chlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2-Methylphenol (o-Cresol)	N	1900	µg/l	0.20	< 0.20	< 0.20
3-Methylphenol	N	1900	µg/l	0.20	< 0.20	< 0.20
4-Methylphenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2-Nitrophenol	N	1900	µg/l	0.20	23	< 0.20
2,4-Dimethylphenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,4-Dichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,6-Dichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
4-Chloro-3-Methylphenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,3,4-Trichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,3,5-Trichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,3,6-Trichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,4,6-Trichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,4,5-Trichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
4-Nitrophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,3,4,5-Tetrachlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,3,4,6-Tetrachlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2,3,5,6-Tetrachlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
3,4,5-Trichlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2-Methyl-4,6-Dinitrophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
Pentachlorophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
2-Sec-Butyl-4,6-Dinitrophenol	N	1900	µg/l	0.20	< 0.20	< 0.20
Total [illegible]ols	N	1900	µg/l	5.00	23	< 5.0
Glyphosate (Subcon)	SN		µg/l	0.01	< 0.02	< 0.02

Appendix B: Uisce Éireann Confirmation that Wicklow WWTP Capacity to Accept Permeate

CONFIRMATION OF FEASIBILITY

Uisce Éireann
Irish Water

Stephen Morrin
Fingleton White
Unit 21, Beckett Way,
Park West Business Park,
D12 C9YE

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

22 April 2025

Our Ref: CDS2200803901

Ballynagran Landfill LTD, Coolbeg Cross, Wicklow

Dear Applicant/Agent,

We refer to the above Development and associated Pre-Connection Enquiries and Connection Applications.

Uisce Éireann has reviewed the information submitted in relation to a Wastewater connection for a Business Connection of 1 unit(s) at Ballynagran Landfill LTD, Coolbeg Cross, Wicklow, (the **Development**).

Based upon the details provided we can advise the following regarding connecting to the networks;

- The leachate from the landfill is currently and will continue to be processed by the site's Reverse Osmosis (RO) Plant and produces 90m3 of permeate per day. A review has been carried out on the permeate test results submitted in the connection application and capacity currently exists at the Wicklow WWTP to accept this load.
- The Wicklow WWTP has a capacity of 34,000pe and a current loading of approximately 21,100pe. Therefore, the available headroom is approximately 12,900pe. The Wicklow WWTP is fully compliant with the EPA license ELV's. The load from the RO treatment facility at Ballynagran Landfill is 230pe(based on the COD) and is therefore approximately 2% of the available headroom.
- The Wicklow WWTP will continue to meet the EPA discharge licence ELVs upon receiving the flows and loads from this connection.

This letter is issued to provide information about the current feasibility of the proposed connection(s) to Uisce Éireann's network(s). This is not a connection offer and capacity in Uisce Éireann's network(s) may only be secured by entering into a connection agreement with Uisce Éireann.

For any further information, visit www.water.ie/connections, email newconnections@water.ie or contact 1800 278 278.

Yours sincerely,

Dermot Phelan
Connections Delivery Manager

Appendix C: Confirmation of Signed and Paid Agreement with Uisce Éireann

Michelle MacLennan

From: newconnections <newconnections@water.ie>
Sent: Tuesday 2 January 2024 17:02
To: Michelle MacLennan
Subject: RE: CDS2200803901 - Ballynagran Landfill Ltd, Coolbeg EMAIL:0585539

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Michelle,

I tried to contact you, but you were unavailable to take the call. The call was to thank you and to confirm that we have received your payment and signed counterpart (Acceptance Letter) for the above stated New Connection application.

In order for your connection works to take place, you are required to have your private side works completed i.e. the pipework brought to the boundary of your property on the private side. It is important that you advise us if this has already been completed, or when you expect this to be completed, as soon as you are in a position to do so. The date of the completion or expected completion of these private side works, is referred to as the "Target Start Date", which is a date by which you are committed to being ready for final connection works to take place. Once we are informed of the Target Start Date, we will then update the regional contractor/local field engineer accordingly.

Once the Target Start Date is provided by you via email or by phone, a Road Opening Licence (ROL), which is normally required, will be applied for to the Local Authority Roads Department by our regional contractor/local field engineer. This licence can take a number of weeks to process and be granted by the Local Authority Roads Department depending on the specific requirements of the connection. Therefore the delivery of connection works can be impacted by the ROL application process.
Once this licence is granted, the regional contractor/local field engineer can provisionally schedule your connection date, which can be on average of 12 weeks from the date of the Road Opening Licence being granted.
Please bare in mind, the Road Opening Licence can take on average 6 weeks to be granted and is outside of the control of Uisce Éireann.

When the necessary designs are completed and all approvals are in place, you will be contacted approximately 14 days prior to the commencement of works.
Please inform us of your Target Start Date by responding to this email or by phoning the New Connections team on 1800 278 278. Once it is confirmed by you, the Road Opening Licence application process can commence and not before.
Note: In the event that a Conformance Cert is a condition of your connection agreement, the connection works cannot proceed until this is in place.

Should you have any queries on the above information, or wish to update us in regards to your proposed Target Start Date, please do so in response to this email.
Regards,
Connecti on and Developer Services

U isceÉi reann
Bosca OP 860, Oifig Sheachadta na Cathrach Theas, Cathair Chorcaí, Éire
Uisce Éirea m

PO Box 860, South City Delivery Office, Cork City, Ireland

T: 1800 2(78
Text to Voice/Voice to text:1800 378 378
www.water.ie

Is don duine amháin nó don eintiteas amháin ainmnithe ar an seoladh an fhaisnéis agus d'fhéadfadh ábhar faoi rún, faoi phribhléid nó ábhar atá íogair ó thaobh na tráchtála de a bheith mar chuid den fhaisnéis. Tá toirmeasc ar aon daoine nó aon eititis; nach dóibh siúd an fhaisnéis- aon athbhreithniú a dhéanamh, aon atarchur a dhéanamh nó aon athdháileadh a dhéanamh, nó aon úsáid eile a bhaint as an bhfaisnéis, nó aon ghníomh a bhraithfeadh ar an bhfaisnéis seo a dhéanamh agus d'fhéadfaí an dlí a shárú dá ndéanfaí sin. Séanann Uisce Éireann dliteanas as aon ghníomh agus as aon iarmhairt bunaithe ar úsáid neamhúdaraithe na faisnéise seo. Séanann Uisce Éireann dliteanas maidir le seachadadh iomlán agus ceart na faisnéise sa chumarsáid seo agus séanann Uisce Éireann dliteanas maidir le haon mhoill a bhaineann leis an bhfaisnéis a fháil. Má tá an ríomh-phost seo faighte agat trí dhearmad, déan teagmháil leis an seoltóir más é do thoil é agus scrios an t-ábhar ó gach aon ríomhaire. D'fhéadfadh ríomhphost a bheith so-ghabhálach i leith truaillithe, idircheaptha agus i leith leasuithe neamhúdaraithe. Séanann Uisce Éireann aon fhreagracht as athruithe nó as idircheapadh a rinneadh ar an ríomhphost seo nó as aon dochar do chórais na bhfaighteoirí déanta ag an teachtaireacht seo nó ag a ceangaltáin tar éis a sheolta. Tabhair faoi deara go bhféadfadh monatóireacht a bheith á dhéanamh ar theachtaireachtaí chuig Uisce Éireann agus ó Uisce Éireann d'fhonn ár ngnó a chosaint agus chun a chinntiú go bhfuiltear ag teacht le beartais agus le caighdeáin Uisce Éireann. Is cuideachta gníomhaíochta ainmnithe é Uisce Éireann atá faoi theorainn scaireanna, a bunaíodh de bhun fhorálacha na n-Achtanna um Sheirbhísí Uisce 2007-2022, a bhfuil a bpríomh-ionad gnó ag Teach Colvill, 24-26 Sráid na Talbóide, BÁC 1.

Go raibh maith agat as d'aird a thabhairt.

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Thank you for your attention.

Appendix: D: AA Screening

Screening for Appropriate Assessment

On behalf of

AGB Landfill Holdings Ltd.
&
Ballynagran Landfill Ltd.

Executive Summary

This Screening Report for Appropriate Assessment was commissioned by Fingleton White Ltd. on behalf of AGB Landfill Holdings Ltd. and Ballynagran Landfill Ltd. for a proposed wastewater connection to transport permeate originating from Ballynagran Landfill to the Uisce Éireann wastewater system in Wicklow.

The screening for appropriate assessment was conducted in accordance with Article 6(3) & 6(4) of the Habitats Directive and aimed to assess the potential effects of the installation of a proposed wastewater connection to transport permeate originating from Ballynagran Landfill to the Uisce Éireann wastewater system in Wicklow.

The Screening report for Appropriate Assessment is required as supporting documentation for a referral being prepared by Fingleton White Ltd. on behalf of their client AGB Landfill Holdings Ltd. and Ballynagran Landfill Ltd. to An Bord Pleanála (ABP), to review a refusal by Wicklow County Council of a Declaration in accordance with Section 5 of the Planning & Development Acts 2000 (as amended) which deals with exempted development, for a proposed wastewater connection to transport permeate originating from Ballynagran Landfill to the Uisce Éireann wastewater system in Wicklow.

Following a referral to An Bord Pleanála (ABP), a letter issued 27th March 2025 requested that the AA screening report be updated to address the destination and treatment of the permeate.

The Screening for Appropriate Assessment Report provide information to the competent authority on the proposed project, its potential impacts, and any significant effects on European sites.

Following completion of a stage 1 Screening for Appropriate Assessment, it can be concluded that beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed project, individually or in combination with other plans and projects, would not be likely to have a significant effect on any European sites.

Table of Contents

List Of Tables

Table of Figures

Document Sign Off			
Document Number:	645114-01		
Reason for Issue:	Final		
Issue Number:	2	**Date:**	17/04/2025
Originator:	**Reviewer:**		**Customer Contact:**
Niamh Mc Mahon	Mark Mc Garry		Michelle MacLennan (Fingleton White) on behalf of AGB Landfill Holdings Ltd. and Ballynagran Landfill Ltd.

Document History:			
Report Revision Number	**Revision Date**	**Section Revised**	**Reason for Revision**
1	15/04/2024	All	To account for An Bord Pleanala (ABP) request for information, reference stage 2 of the project

1.0 Introduction

Axis Environmental Services Ltd. were commissioned by Fingleton White Ltd. to complete this screening for Appropriate Assessment in order to support an Appeal to Review a Declaration in accordance with Section 5 of the Planning & Development Acts 2000 (as amended) submission to An Bord Pleanála (ABP) being prepared on behalf of AGB Landfill Holdings Ltd. and Ballynagran Landfill Ltd. for a proposed wastewater connection to transport permeate originating from Ballynagran Landfill to the Uisce Éireann wastewater system in Wicklow.

ABP subsequently revert with a letter dated 27th March 2025 requesting the following:

- Details of the expected concentration ranges of the treated leachate permeate for relevant parameters having particular regard to hazardous substances.
- Details of the destination wastewater treatment plant (WWTP) to which the treated leachate permeate is to be piped to and its ultimate discharge location.
- Demonstration that the WWTP has the capability to treat the permeate to the necessary standard such that its subsequent discharge will not affect the integrity of any European site.
- An updated AA screening report which addresses the destination and treatment of the permeate.

The screening for appropriate assessment was conducted in accordance with Article 6(3) & 6(4) of the Habitats Directive and aimed to assess the potential effects of the installation of a 4km section of pipeline used to transfer treated permeate on European sites within 15km of the proposed development site.

The screening report for appropriate assessment is to be provided to the competent authority (ABP) as supporting information to provide all necessary information on the proposed project, it's potential effects and the significance of those effects on European sites.

The proposed development does not form part of any European Site, nor is it necessary to the management of any European Designated Site.

1.1 Appropriate Assessment Screening Process

Appropriate Assessment (AA) is a requirement of the Habitats Directive, where Article 6(3) specifies that 'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an appropriate assessment of its implications for the site in view of the sites conservation objectives.'

Appropriate Assessment is a 4 -stage process as illustrated in fig 1.1 below.

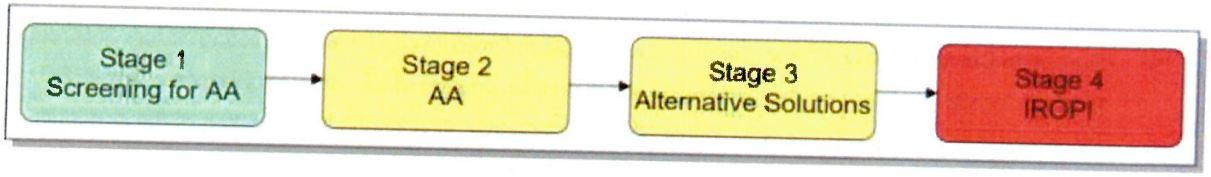


Fig. 1.1 Schematic of Appropriate Assessment (DoEHLG, 2010)

Screening for Appropriate Assessment is Stage 1 and is completed to assess whether the project will have significant effects either individually or in combination with other plans or projects on Natura 2000 sites in view of its conservation objectives and considering whether these effects will be significant
Screening determines whether appropriate assessment (stage 2) is necessary by examining:

1) whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and
2) the potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives and considering whether these effects will be significant. Where is cannot be excluded beyond reasonable scientific doubt at the screening stage, that a proposed plan, either individually or in combination with other plans or projects, would have a likely significant impact on the conservation objectives of a European site, then an Appropriate Assessment (AA) resulting in a Natura Impact Statement (NIS) will be completed.

The guidelines state that screening is an iterative process which involves consideration of the plan or project and its likely effects, and of the Natura 2000 sites and their ecological sensitivities and the likely interaction between these.

The screening process should include the following:
1. A description of the plan or project and local site or plan area characteristics
2. Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives.

Where the screening report, taking account of the precautionary principle, cannot rule out an impact or potential impact of the proposed project on a European Site, then a stage 2 Appropriate Assessment must be undertaken.

Where the plan or project is deemed to have a negative impact on a European site, the plan may only go ahead where all reasonable alternative solutions have been exhausted and the plan or project is undertaken for imperative reasons of overriding public interest (IROPI), including economic or social reasons. Where priority habitats or species are at risk, the requirements for IROPI become stricter and will only be approved where human health, public safety, or beneficial consequences of primary importance to the environment occur. Where IROPI is being claimed, then a request from the Commission must be made via the Minister before finalisation of the AA (DoEHLG, 2010).

This following screening for appropriate assessment report has been prepared in accordance with the guidance below;

- Department of Environment, Heritage and Local Government (2010), Appropriate Assessment of Plan and Projects in Ireland- Guidance for Planning Authorities
- European Commission (2001), Assessment of Plans and Projects significantly affecting Natura 2000 sites- Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts of: Alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission (2007)

- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2000)
- EPA (2012), Note on Appropriate Assessments for the purposes of the Wastewater Discharge (Authorization) Regulations, 2007 (S.I. No. 684 of 2007), as amended.
- European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011).
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (National Roads Authority, 2004)
- Guidelines-for-the-Crossing-of-Watercourses-during-the-Construction-of-National-Road-Schemes, (National Roads Authority, 2008)

The report is generated by desk top review using the following online databases;

- National Parks & Wildlife Services (NPWS)
- National Biodiversity Data Centre (NBDC)
- EPA maps (https://gis.epa.ie/epamaps/)
- Environmental Sensitivity Mapping (enviromap.ie)

1.2 Limitations

The detailed design pack was issued to Uisce Eireann for review. No changes were requested.

Changes to the project which result in in-stream works will be deemed significant and will require an updated screening report.

A site visit was unable to be undertaken by Axis Environmental Services Ltd. given the time constraints related to the project, however Fingleton White have driven/walked the route and taken videos and photos of area, particularly the two visible stream crossings on bridges. As the route is along the public road, it is also visible from Google Maps street view.

Specific details on the layout of the sewer network belonging to Uisce Éireann were unable to be confirmed at the time of writing this report, however the connection point (-6.062, 52.967) and end point for discharge from Wicklow WWTP (331534 E, 194326 N) are known

1.3 Statement of Authority

Niamh Mc Mahon (BSc., Environmental Science & Technology, Msc.in Biodiversity and Land Use Planning) completed the report related to this project. Niamh has over 20 years' experience in the environmental sector and has acted as lead environmental consultant on many projects ranging from Appropriate Assessment, Ecological Impact Assessment Reports, Environmental Impact Assessments, ISO 14001 certification, and EPA licenced reports

2.0 Description of the Project

2.1 Introduction

The main aim of the project is to provide an alternative to the existing tankering of permeate from the industrial emissions licenced site (W0165-02), Ballynagran Landfill, given the proposed closure of the landfill by Q1 2026.

AGB Landfill Holdings and Ballynagran Landfill Ltd. intend to refer for review a refusal by Wicklow County Council of a Declaration in accordance with Section 5 of the Planning & Development Acts 2000 (as amended) which deals with exempted development to An Bord Pleanála (ABP), on behalf of their client AGB Landfill Holdings Ltd. and Ballynagran Landfill Ltd., for a proposed wastewater connection to transport permeate originating from Ballynagran Landfill to the Uisce Éireann wastewater system in Wicklow.

Wicklow County Council refused the Declaration stating;
'It is considered that the scale and type of the works proposed would not come within the description set out under Class 48, and therefore the works would not be exempted development.

The Planning Authority considers the " the laying of rising main between Ballynagran Landfill to Uisce Éireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751" is development and is not exempted development."

This report was submitted to An Bord Pleanála (ABP) to support the review. ABP subsequently reverted with a letter dated 27th March 2025 requesting the following:

- Details of the expected concentration ranges of the treated leachate permeate for relevant parameters having particular regard to hazardous substances.
- Details of the destination wastewater treatment plant (WWTP) to which the treated leachate permeate is to be piped to and its ultimate discharge location.
- Demonstration that the WWTP has the capability to treat the permeate to the necessary standard such that its subsequent discharge will not affect the integrity of any European site.
- An updated AA screening report which addresses the destination and treatment of the permeate.

Stage 1 of the project proposal includes the installation of a pipeline to allow for the transportation of permeate in the long-term to an approved Uisce Éireann connection point, located approximately 4 km from the landfill. Ballynagran Landfill will be responsible for this section of the works from construction/ installation to decommissioning.

Stage 2 of the project proposal being the transportation of the treated permeate from the Uisce Éireann connection point to Wicklow Wastewater Treatment Plant (WWTP), through existing Uisce Éireann pipework will be the responsibility of Uisce Eireann. Stage 2 represents the update of the report to revision 2 and is associated with the request from ABP detailed below.

A copy of the communications with ABP, Wicklow County Council & Uisce Éireann are available for review in Appendix A.

2.2 Project Background

"Ballynagran Landfill is currently generating approximately 23,000 m³ per annum of permeate (2018: 22,577m³; 2019: 28,147m³, 2020:20,834 m³, 2021: 20,061 m³). The landfill is currently projected to be in operation until the end of 2025. When closed the landfill will continue to generate approximately 8,000 m³ of permeate per annum.

This project does not alter the nature of the landfill or quantity of permeate produced. The motivation for this project is to reduce carbon emissions by removing tankers from Irish roads as at present the permeate is removed by up to a maximum of six tankers daily to the treatment plant in Ringsend, Co. Dublin, 50 km away.

The wastewater connection will remove up to 8,000 HGVs from the road network and reduce carbon emissions by an estimated 2,691 tonnes of carbon dioxide (CO_2) over the life of the landfill. At present the permeate is removed from Ballynagran Landfill by up to a maximum of six tankers daily to the treatment plant in Ringsend, Co. Dublin, 50 km away. We would like to deliver these environmental benefits and complete the connection as soon as possible.", reference Fingleton White Project summary in Appendix B.

2.3 Site Location

The entire project is located within Wicklow County Council Administrative boundary.

Stage 1

The proposed project begins at the Ballynagran Residual Landfill, Ballynagran, Coolbeg and Kilcandrea, County Wicklow, A67 KF53 and runs along public roadways for approximately 4 km in an east, north east direction until it reaches the approved Uisce Éireann Connection point on the R751 Ballynerrin Upper at -6.062, 52.967 approximately 6 metres from the existing network, reference figure 4 below.

Ballynagran Landfill is licenced by Greenstar Holdings Ltd. under EPA Industrial Emissions Licence W0165-02 since 23/03/2010. A Screening for Appropriate Assessment was first completed by the EPA in November 2016 in relation to the licence which stated;

"A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Maherabeg Dunes SAC (Site Code: 001766), Deputy's Pass Nature Reserve SAC (Site Code: 0007 I7), The Murrough Wetlands SAC (Site Code: 002249), The Murrough SPA (Site Code: 004186), Vale of Clara (Rathdrum Wood) SAC (Site Code: 000733), Buckroney Brittas Dunes and FEN SAC (Site Code: 00072 9). The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required. The reasons for which the Agency determined that an Appropriate Assessment of the proposed activity is not required are as

follows: - The installation is not located within the above listed European Sites. There are no emissions to water courses from the installation and there will be no change on foot of the proposed technical amendment. There are no emissions to groundwater from the installation and there will be no change on foot of the proposed technical amendment. Storm water is passed through an oil interceptor before being collected on site in a lined surface water lagoon. Controls are in place to prevent discharge of contaminated storm water from the surface water lagoon. The activity will not result in damage to, or loss of, species and habitats of these European Sites."

Subsequent screenings have also been completed as part of Technical Amendment D, issued in August 2019 and Technical amendment E, issued in December 2020. Both again concluded that an appropriate assessment could be screened out on the basis that;

"The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required."

The licence originally covered an area of approximately 128 hectares, with landfill footprint occupying 21 hectares. The overall area was subsequently reduced through Technical Amendments D & E. The licence requires that a buffer zone was provided and maintained within the facility. The buffer zone shall be the area between the landfill footprint and installation boundary.

The landfill, which accepts residual non-hazardous household, commercial and industrial waste, consists of 5 separate phases and contains a total of 21 separate cells. Sludges are not permitted to be disposed of at the facility. The facility has been designed to accept a total of 175,000 tonnes of waste per annum for disposal and 28,000 tonnes of waste per annum for recovery. The lifespan of the facility is 15 years and so decommissioning should occur before December 2025.

"A Reverse Osmosis (RO) plant has been installed at Ballynagran Landfill and the permeate from the landfill will be processed by this RO plant. The RO plant produces a maximum of 90 m³ of permeate per day. The permeate will be stored in the site's 261 m³ permeate holding tank. The proposed pipeline will discharge this permeate from site through a rising main to the Uisce Éireann wastewater network", reference Fingleton White Project summary in Appendix B.

The operational landfill is currently producing in the region of 23,000 m^3 which is anticipated to generate 8,000 m^3 per annum upon closure. The connection to a wastewater network will result in the following:

- A long-term sustainable solution for the management of permeate from operations through to closure and after care
- Reduced carbon footprint following the reduction of road transport

Surface waters

The proposed route, reference figures 4 & 5 below, cross a total of three waterways namely Glenealy Castle located at the boundary of Ballynagran Landfill with the other two rivers crossing the R571, namely Coolbeg 10 and Woolaghans. All crossings are completed on tributaries on the same river- the Three Mile Water which

Discharges into the Southwestern Irish Sea via the Magherabeg Dunes SAC. The river crossings are all located approximately 6km upstream of the Maherabeg Dunes SAC, reference figure 7.

The Water quality of the Three Mile Water River and its Tributaries, as well as the Coastal waterbody located at the South Western Irish Sea- Killiney Bay vary between good – high under the WFD 2016-2021.

Geology & Hydrogeology

The proposed pipeline initially staggers between the geological formations of Ballylane Formation, made up of green and grey slate with thin siltstone and the Kilmacrea Formation which is dominated by dark grey slate with minor pale sandstones. The final destination of the pipeline and the connection with Irish Water main is made within the Wicklow Head Formation which consists of silvery-grey mica- chlorite garnet schists.

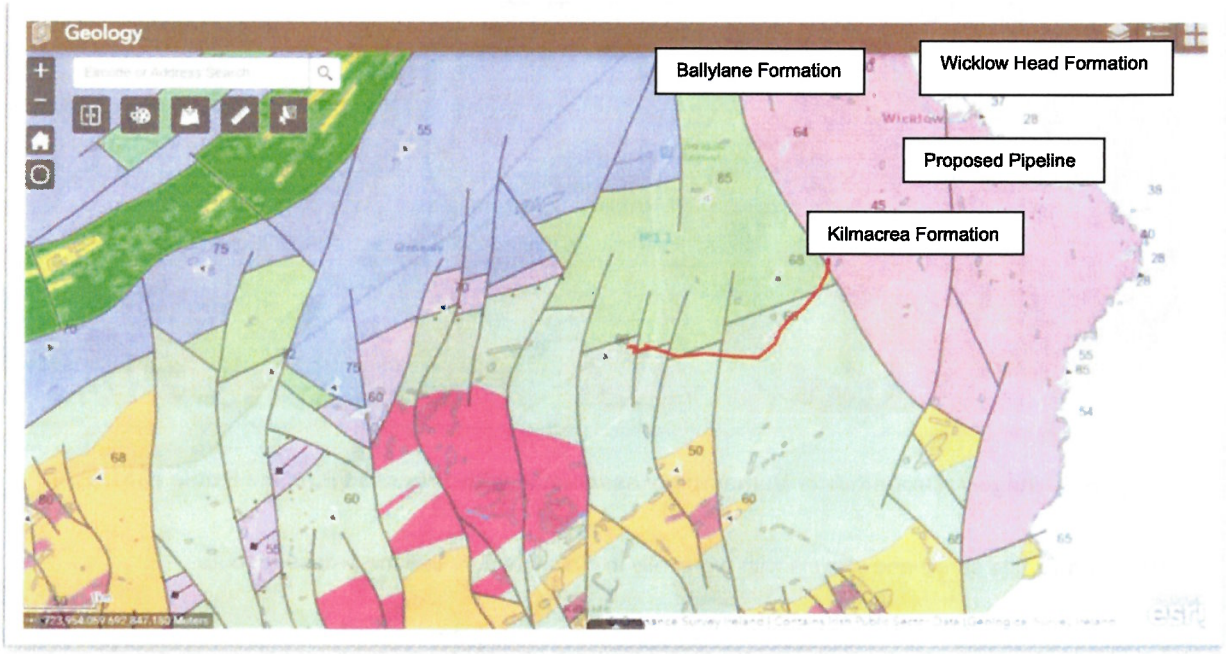


Figure 1 Stage 1: Bedrock Geology associated with Proposed Pipeline Route (GSI.ie)

The pipeline crosses through a mosaic of poor aquifers and locally important aquifers, shadowing existing roadways throughout its expanse.

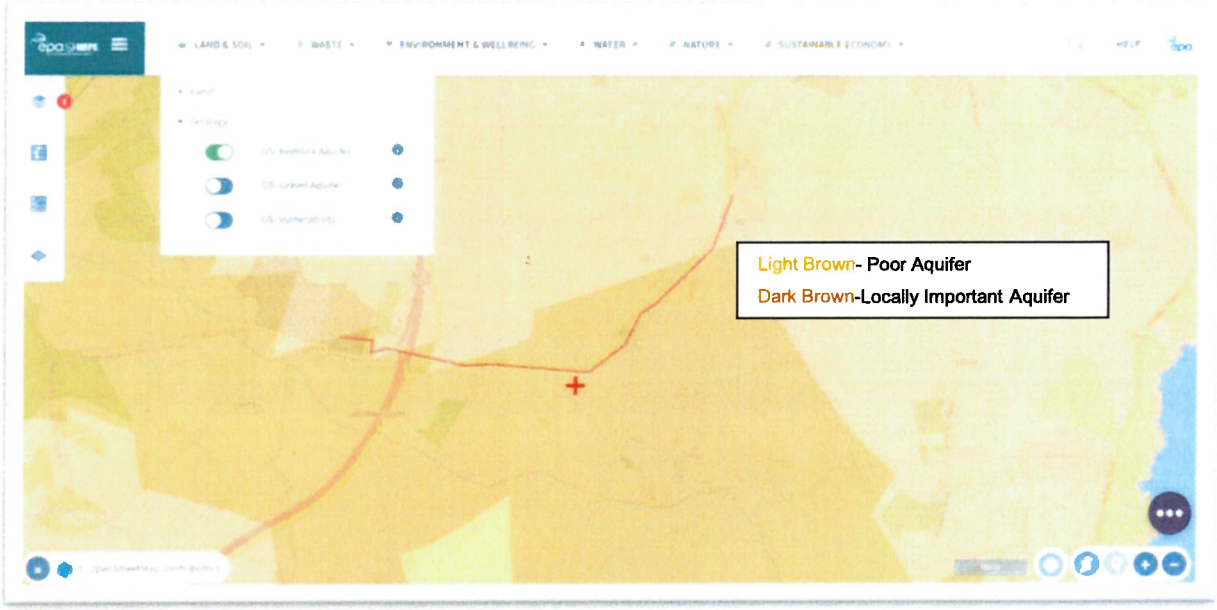


Figure 2 Stage 1: Aquifer Status associated with Proposed Pipeline Route (GSI.ie)

The Groundwater is classed 'Good' under the latest round of the Water Framework Directive-2016-2021, throughout the expanse of the proposed project area, with groundwater vulnerability being classed as high.

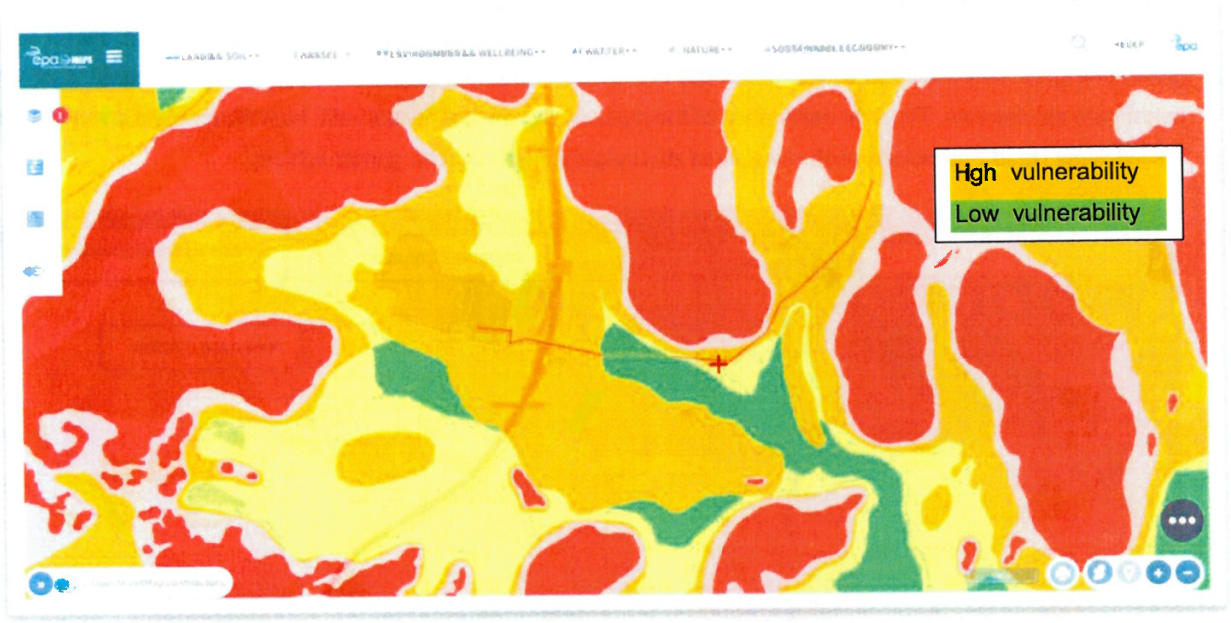


Figure 3 Stage 1 Groundwater Vulnerability associated with Proposed Pipeline Route (GSI.ie)

Sandstone and shale sands and gravels with a gravelly to clayey texture line the proposed route

Flood Risk Assessment

A review of the flood maps on floodinfo.ie, illustrated that the project pipeline is not within any flood zones.

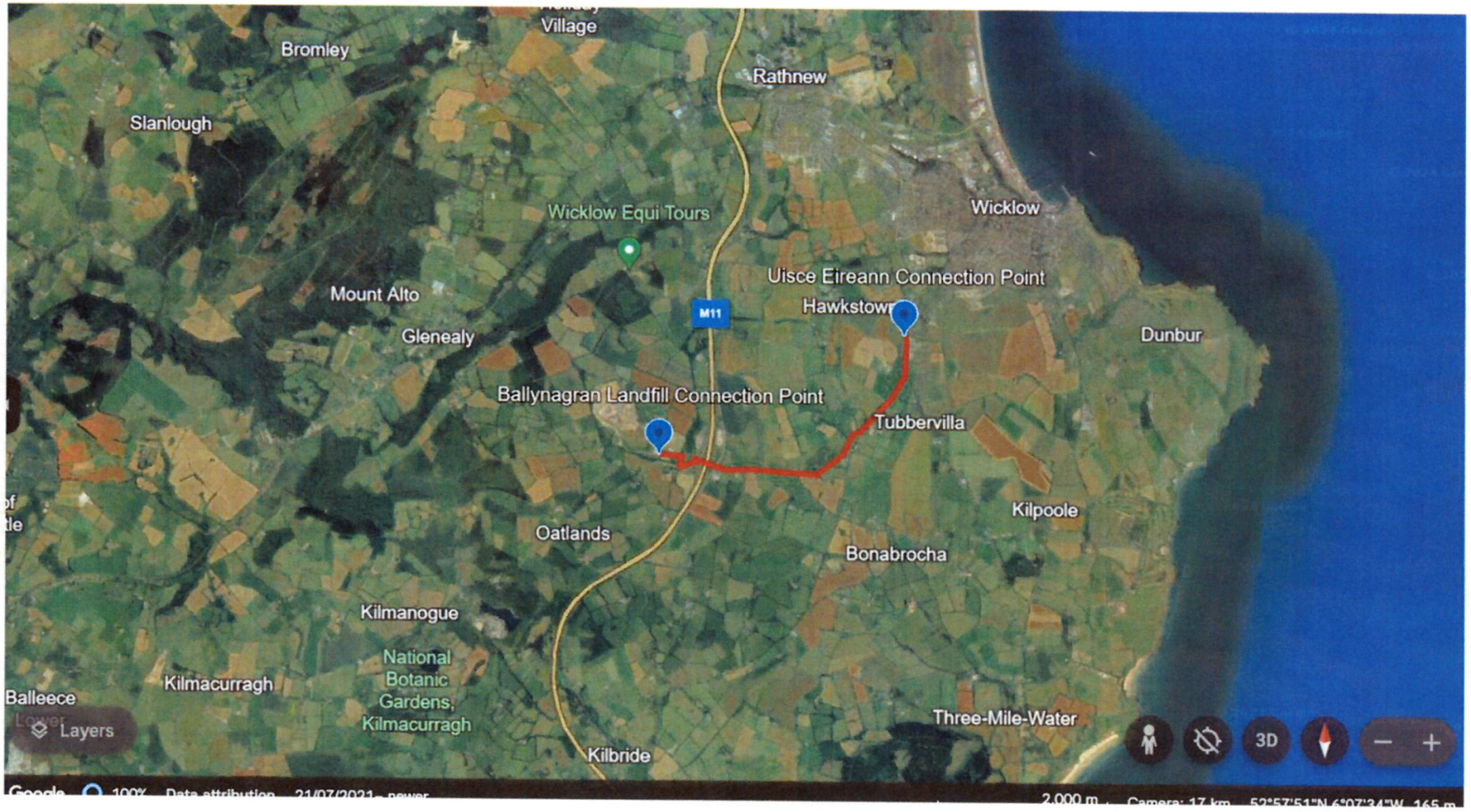


Figure 4 Stage 1: Location of Pipeline Ballynagran Landfill to Uisce Éireann Connection Point (google earth)

Figure 5 Stage 1: Proposed Pipeline Route

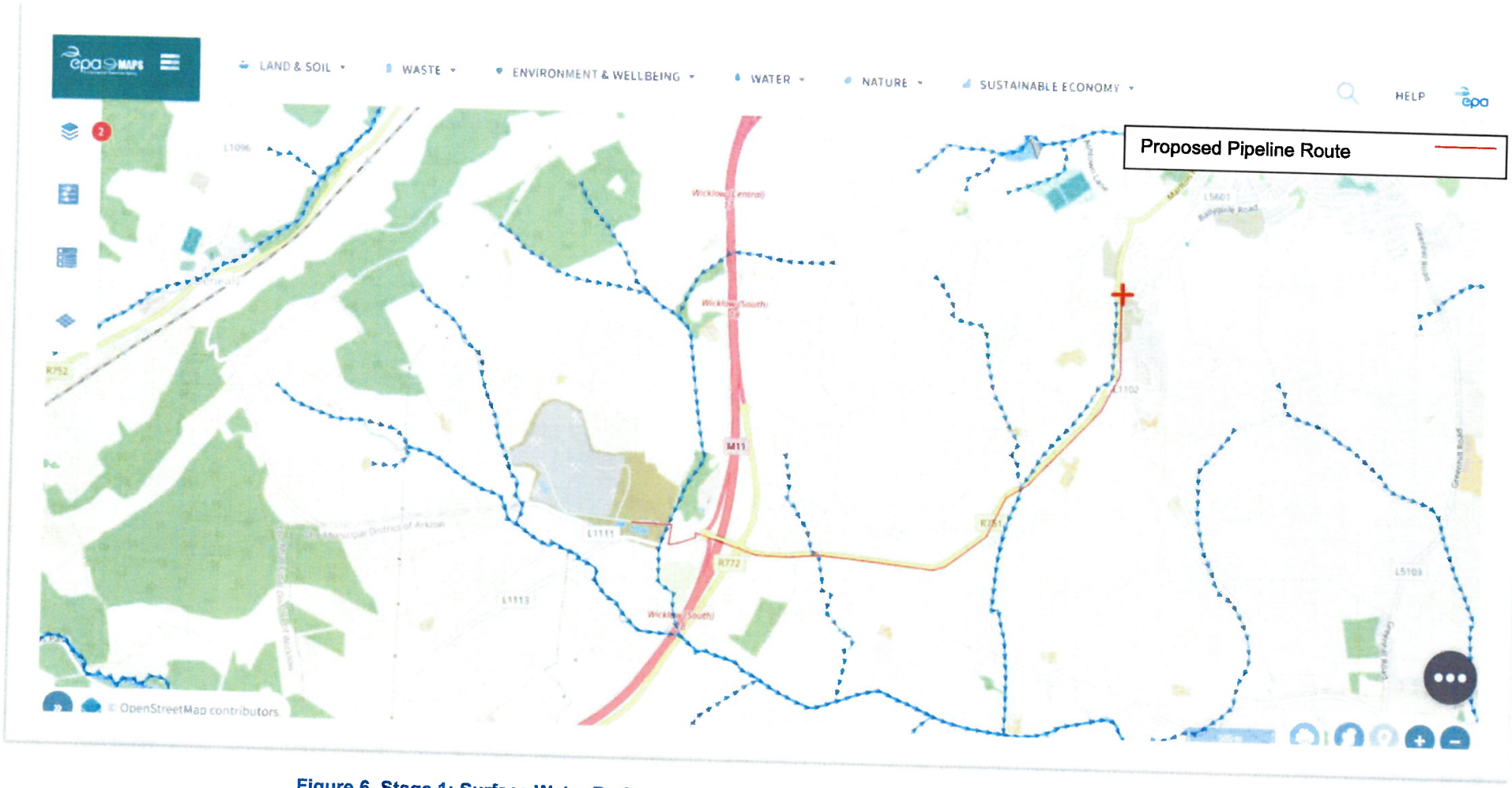


Figure 6 Stage 1: Surface Water Drainage associated with Proposed Pipeline (EPA maps, 2024)

Figure 7 Stage 1: Surface Water Crossings & Associated SAC (EPA maps.ie)

Figure 8 Stage 2: Uisce Éireann Connection Point (x) & Wicklow WWTP Final Discharge Location (EPA Maps)

Figure 9 Stage 2 Coastal (High Status) & Transitional Waterbody (Moderate) WFD Status (2013-2018)

Figure 10 Stage 2: Natura 2000 sites associated with Uisce Éireann owned Section of the Project including Wicklow WWTP Final Discharge Point

2.3 Project Description

S tage1

AGB Landfill Holdings intend to construct a pipeline to transport the permeate from Ballynagran Landfill to an agreed Uisce Éireann connection point. This proposed pipeline will be approximately 4 km in length, running in the public road and verge, where possible, and will cross the M11 between the landfill site and the Uisce Éireann connection point. The location of the landfill site is (52.954247, -6.105508) and the location of the Uisce Éireann connection point is (52.967, -6.062).

A Reverse Osmosis (RO) plant has been installed at Ballynagran Landfill and the permeate from the landfill will be processed by this RO plant. The RO plant produces a maximum of 90 m^3 of permeate per day. The permeate will be stored in the site's 261 m_3 permeate holding tank. The proposed pipeline will discharge this permeate from site through a rising main to the Uisce Éireann wastewater network.

In the event of an emergency, the Ballynagran Landfill Ltd has an existing 2,000 m^3 permeate lagoon (~ 22 days storage) and 261 m^3 permeate holding tank (2.9 days storage) which will be used to store the permeate if discharge is halted.

The pipe for transfer will be 110 mm PE80 SDR11 pipe and will be buried to a depth of 1.2 m . An assessment was carried out to determine the optimum pipe size for the proposed application, considering the recommended velocities, pressure drop, required pump head, operating hours, and flowrates. The pipe sizing and pumping hours have been approved by Uisce Éireann as part of the connection application. A review and approval of the pipeline detailed design was performed by Uisce Éireann, such that the pipeline can be constructed and connection made to the Uisce Éireann network."

The rising main will be of polyethylene material in accordance with Irish Water Code of Practice for Wastewater Infrastructure. The pipework and fittings will comply with the requirements of IS EN 12201. Polyethylene fittings, including fusion joints and electro-fusion fittings, shall comply with the provisions of IS EN 12201 – Part 3.

The connection offer was received from Uisce Éireann in September 2023 and signed and finalised in December 2023. The agreed connection point is -6.062,52.967 approx. 6 m from the existing network, on the R751 Ballynerrin Upper.

There have been a number of river crossings identified on ArcGIS along the pipeline route outside of the existing Ballynagran Landfill site. Surface water is only visible at the river crossing on the existing Ballynagran Landfill site as well as of the Woolaghans Bridge Crossing, River Crossing 2 as per figure 11 below. Both crossings are bridged. The crossing at the Ballynagran Landfill site will be bridged using an existing pipe corridor, whereas it is proposed that the pipeline be buried in the structure of Woolaghans Bridge, ensuring no impact on water in either case.

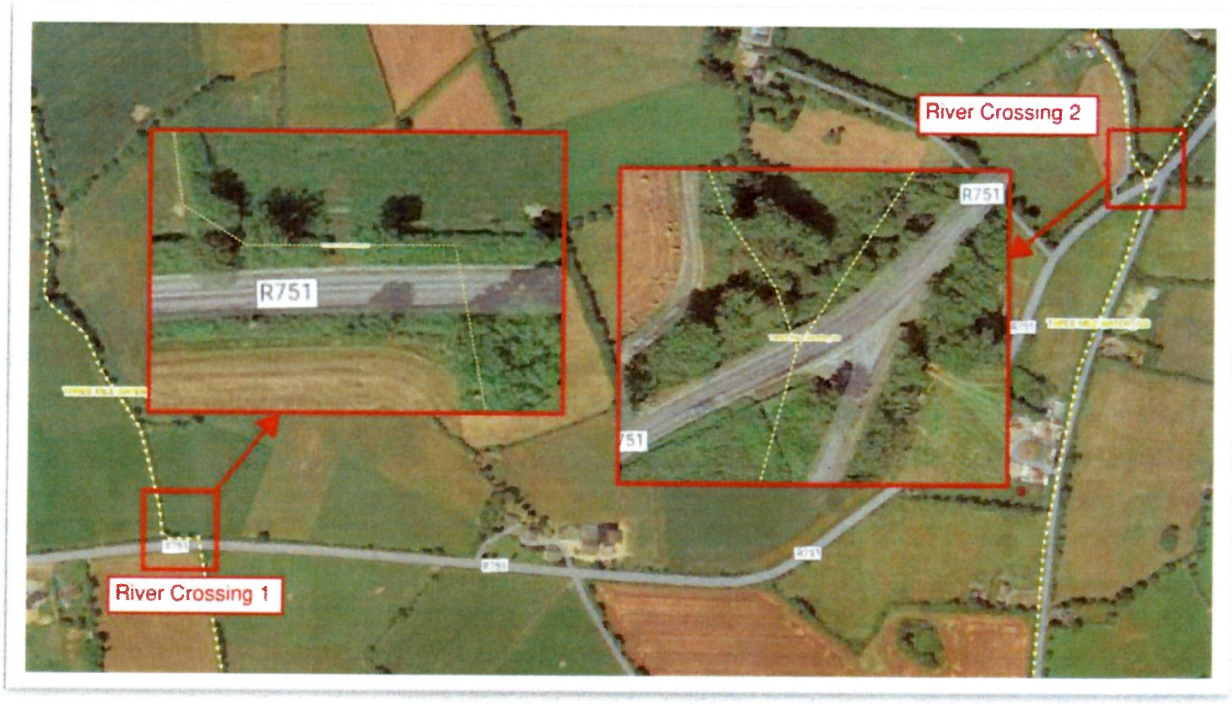


Figure 11 Potential Stream Crossings Identified Along the Planned Pipeline Route.

Stage 2

Stage 2 of the project is associated with the transportation of the treated permeate from Uisce Éireann connection point -6.062, 52.967, through Uisce Éireann existing infrastructure to Wicklow WWTP where it is treated in line with EPA Waste Water Discharge licence D0012-01 before discharging via final effluent point ref. TPEFF3400D0012SW001 located at 331534 E, 194326 N.

Specific details on the layout of the sewer network belonging to Uisce Éireann were unable to be confirmed at the time of writing this report, however the connection point (-6.062, 52.967) and end point for discharge from Wicklow WWTP (331534 E, 194326 N) are known, reference figures 8-11 above. Given this is the existing sewer network which is used by Uisce Éireann they will be responsible for all monitoring and maintenance work associated with their system once the connection is made.

A review of the Wicklow WWTP EPA licence, ref. D0012-01, illustrated that the licence has been subject to Technical Amendment most recently on 02/12/2021 where the EPA completed a Screening for Appropriate Assessment. The Agency determined the following;

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required. This determination is based on the fact that the proposed amendment will not result in a change to the nature or volume of the discharges from the agglomeration.

As per the connection offer received from Uisce Éireann, the ownership, maintenance, repair or renewal of the pipework is the sole responsibility of Ballynagran Landfill Ltd. up until the Uisce Éireann Connection Point.

Once the connection is made at Uisce Éireann connection Point 52.966910, -6.0624747, the permeate will be transported using the Uisce Éireann existing network to Wicklow Wastewater Treatment Plant (WWTP). This site has a final discharge point (reference TPEFF3400D0012SW001), which is licenced by the EPA under D0012-01. This section of the works use the existing sewage system which is owned and maintained by Uisce Éireann.

It is proposed that a maximum volume of 142m^3 will be pumped from Ballynagran Landfill to Wicklow WWTP for treatment, during overnight hours of 11pm to 6 am. The landfill at Ballynagran is licenced by Greenstar Holdings Ltd. under EPA Industrial Emissions Licence W0165-02 to accept residual non-hazardous household, commercial and industrial waste only.

A sample of the treated permeate was analysed on a number of occasions by a number of different laboratories. Results include a full screen for PAH, VOC, SVOC's, Metals, Organochlorine Pesticides as well as the more typical parameters of BOD, COD, Conductivity, pH, Suspended solids , ammonia etc., reference appendix C. Overall the results illustrate that the permeate is less than the limit of detection for a wide range of test parameters and is a suitable candidate for further treatment in an Uisce Éireann treatment plant.

A review of the permeate quality, reference Uisce Éireann application vs. the influent quality to Wicklow WWTP is undertaken in the table below. The results below illustrate that the quality and hydraulic load of the permeate is not significant.

Table 1 Comparison of Results of Influent at Wicklow WWTP vs Permeate Quality as detailed in Uisce Éireann application form.

	COD- Cr (mg/l)		Suspended Solids (mg/)l		BOD (5 days with carbonaceous inhibition) mg/l		Hydraulic Capacity m^3/day	
	Ballynagran Landfill Treated Permeate							
	Max	Mean	Max	Mean	Max	Mean	Max	Mean
	159	89	<10	< 10	40	24.5	142	90
	Wicklow WWTP D0012-01 Influent Results							
AER 2024	Not available at the time of writing this report							
AER 2023	447	229	224	100	122	76	1 8117	8423
AER 2022	637	315	430	150	359	141	17976	7307

A review was completed on the water.ie website which illustrate the Wicklow WWTP plants' spare capacity, illustrated as green, reference figure 12 below.

Region	County	Settlement	Wastewater Treatment Plant (WWTP)	Reg #	Indication of Available Capacity	WWTP Project Planned/Underway
EM	Wicklow	Bray	Shanganagh WWTP	D0038	• Green	
EM	Wicklow	Greystones	Greystones WWTP	D0010	• Green	
EM	Wicklow	Wicklow	Wicklow WWTP	D0012	• Green	

Figure 12 Extract from Water.ie illustrating Spare Capacity at Wicklow WWTP (D0012) Dec. 2024

Uisce Éireann have also completed a review of the Wicklow WWTP capacity to treat this material and a connection agreement has been approved, reference Appendix B.

Given there have been no new designations of protected sites in the vicinity of the discharge location, together with the quality of the permeate, available capacity in the WWTP, the agreement by Uisce Éireann to accept the wastewater for treatment and the EPA screening for appropriate assessment which was based on the capacity of the WWTP as constructed, it is considered that the treatment of this permeate under stage 2 of this project would not have a significant impact on any Natura 2000 site.

3.0 Identification of European sites

A review of the European sites both in and bordering the zone of influence of 15km, as recommended by the Department of the Environment Guidance (2009), to the proposed development site was undertaken using online mapping systems from the National Parks & Wildlife Services (NPWS) and the Environmental Protection Agency (EPA). The assessment was completed at the Ballynagran Landfill site for stage 1, the most westerly position and the Wicklow WWTP final discharge location for stage 2, the most easterly direction in order to capture the entire project.

Figure 13 below illustrates the location of the European sites in the Republic of Ireland (Special Areas of Conservation (red) & Special Protection Areas (pink)) within a 15km radius zone of influence (ZOI) of the proposed project site.

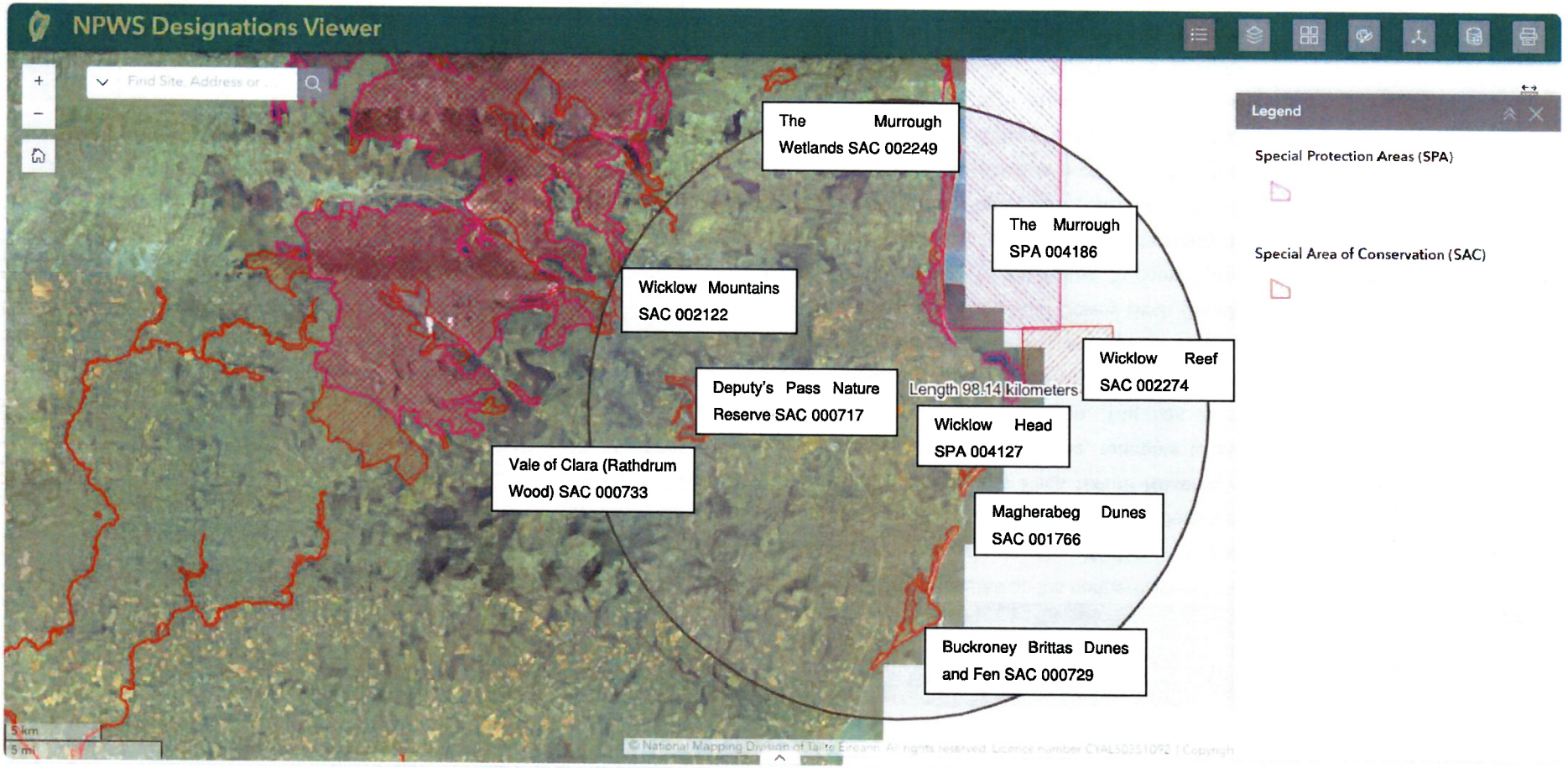


Figure 13 European sites within 15km from the proposed pipeline (NPWS.ie)

Table 2 below lists the European sites, qualifying interests and provides a link to the conservation objectives of each of the sites located at NPWS.ie The table has been generated using the EPA Appropriate Assessment tool for stage 1 and stage 2 locations.

Table 2 Natura 2000 Sites within 15km Zone of Influence

Site Type	Site Code	Site Name	Distance To (m)	Qualifying Interests (* denotes a priority habitat)	Site Synopsis	Conservation Objectives
SAC	000717	Deputy's Pass Nature Reserve SAC	Stage1 3524.64 Stage 2 6773.67	**Habitats** 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles	Deputy's Pass woodland is located on the northern spur of the Deputy's Pass near Glenealy in Co. Wicklow. It was designated a Nature Reserve in 1982. The predominant vegetation community in Deputy's Pass Nature Reserve is Sessile Oak (Quercus petraea) woodland, referable to the Blechno-Quercetum petraeae association. The oak is of coppice origin, 70-80 years old, and forms a nearly closed canopy. Other tree species present are Rowan (Sorbus aucuparia), Holly (Ilex aquifolium), and Downy Birch (Betula pubescens), occurring mainly at the edges. In some areas Beech (Fagus sylvatica) also occurs. The understorey is formed of oak saplings, Holly and Hazel (Corylus avellana), while the ground flora of the wood is dominated by Great Wood-rush (Luzula sylvatica), Bilberry (Vaccinium myrtillus), Hard Fern (Blechnum spicant), and Bramble (Rubus fruticosus agg.). Heather (Calluna vulgaris) and Bracken (Pteridium aquilinum) are abundant in some areas. In some parts, Bluebells (Hyacinthoides non-scripta), Male Fern (Dryopteris filix-mas), Hayscented Buckler-fern (D. aemula), Sanicle (Sanicula europea) and Wood-sorrel (Oxalis	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000717.pdf

					acetosella) occur commonly. The regeneration of native trees and the good ground cover indicate an absence of grazing; there are no sheep in the site and deer very seldom occur. Less than 10% of the site is occupied by conifers. Where they are present they consist of 20-30 years old plantations of Douglas Fir (Pseudotsuga menziesii), Sitka Spruce (Picea sitchensis), Norway Spruce (P. abies), European Larch (Larix decidua) and Scots Pine (Pinus sylvestris). Once mature these small stands will be removed, to allow native species to naturally replace them. The site supports breeding populations of the Smooth Newt (Triturus vulgaris) and the Common Frog (Rana temporaria), amphibians protected by the Wildlife Act, 1976. Deputy's Pass is managed as a Nature Reserve and is part of an internationally important series of oak woods in Co. Wicklow which are almost certainly natural in origin and which retain much of their original character and species composition (other examples include Glendalough, Clara Vale and Ballinacor)	
SAC	002249	The Murrough Wetlands SAC	Stage 1 5.2 km Stage 2 750 m	**Habitats** 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia	The Murrough is a coastal wetland complex which stretches for 15 km from Ballygannon to north of Wicklow town, and in parts, extends inland for up to 1 km. A shingle ridge stretches the length of the site and carries the mainline Dublin Wexford railway. Recent farming and drainage practices and afforestation have greatly reduced the area and quality of the wetlands habitats - the area between Kilcoole and Newcastle is particularly affected. In 1997 there was some levelling of the sand hills below Killoughter station. Pollution, reclamation and further drainage would adversely affect this site. A section of	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002249.pdf

				maritimi) 7210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae* 7230 Alkaline fens	the wetlands at Blackditch, which includes alkaline and Cladium fen, has been acquired by BirdWatch Ireland and is being managed for nature conservation. This site is of importance as it is the largest coastal wetland complex on the east coast of Ireland. Although much affected by drainage, it still contains a wide range of coastal and freshwater habitats, including six listed on Annex I of the E.U. Habitats Directive, some of which contain threatened plants. Areas on the site contain a rich invertebrate fauna, including several rarities. It is an important site for both wintering and breeding birds and supports a variety of species listed on Annex I of the E.U. Birds Directive	
SAC	001766	Magherabeg Dunes SAC	Stage 1 5566.61 Stage 2 4882.48	**Habitats** 1210 Annual vegetation of drift lines 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 7220 Petrifying springs with tufa formation (Cratoneurion)*	Magherabeg Dunes SAC is a sand dune system situated at Ardmore Point, about 5 km south of Wicklow Head in Co. Wicklow. The Three Mile Water River enters the sea through the dunes. The site is fairly intact, though some areas are being naturally eroded by wind and sea, in particular at the southern end, where bedrock has been exposed. The Three Mile Water River, which flows through the dunes provides habitat for wetland species such as sedges, including Bladder Sedge (Carex vesicaria), Fox Sedge Version date: 19.09.2019 2 of 2 001766_rev19.docx (C. otrubae) and Grey Sedge (C. divulsa). The very rare hybrid sedge, Carex x grossii (C. hirta x C. vesicaria) has also been recorded here. Common Reed (Phragmites australis) is also found along the river. The site is of conservation importance because it is a fine example of a dune system which is fairly intact and which has a well-developed flora. The lack of easy public access to this site has	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001766.pdf

					undoubtedly helped in preventing damage and erosion from amenity activities. The presence of wetland vegetation on the site is of additional interest.	
SAC	000729	Buckroney-Brittas Dunes and Fen SAC	Stage 1 7382.36 Stage 2 8070.52	**Habitats** 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks 1410 Mediterranean salt meadows (Juncetalia maritimi) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea)* 2170 Dunes with Salix repens ssp. argentea (Salicion arenariae) 2190 Humid dune slacks 7230 Alkaline fens	Buckroney-Brittas Dunes and Fen is a complex of coastal habitats located about 10 km south of Wicklow town. It comprises two main sand dune systems, Brittas Bay and Buckroney Dunes, connected on the coast by the rocky headland of Mizen Head. The dunes have cut off the outflow of a small river at Mizen Head and a fen, Buckroney Fen, has developed. A further small sand dune system occurs south of Pennycomequick Bridge. The dune systems and beaches are subject to high amenity usage from day-trippers and several areas around the site have been developed as caravan parks, car parks and golf courses. The marginal areas of the fen have been reclaimed, especially at the south end, though these areas still flood in winter and attract waterfowl. This site is important as an extensive sand dune/fen system with well-developed plant communities. Several coastal habitats listed on the E.U. Habitats Directive, including two priority habitats - fixed dune and decalcified dune heath - are present. The area contains two legally protected plants, as well as a number of other rare or scarce plant species. The site provides habitat for some rare species of invertebrate and for the vulnerable Little Tern. A rich flora and fauna has persisted on this site despite extensive amenity use and adjacent farming. However, future land use practices will need to be managed to ensure the continued survival of this unique mosaic of coastal habitats	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000729.pdf

SAC	000733	Vale of Clara (Rathdrum Wood) SAC	Stage 1 7554.35 Stage 2 10414.80	**Habitats** 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles	The Vale of Clara woodland is situated mostly on the east side of the Avonmore River, immediately north of Rathdrum in Co. Wicklow. It lies between 107 and 244 m above sea level, and forms an integral part of one of the most scenic valleys in Wicklow. The woodland is a remnant of the once extensive forests of east Wicklow, which may have occupied this site since the end of the last Ice Age. Unfortunately, the hardwoods have been replaced, or underplanted with conifers, since the 1940s. However, most of the site is now within the Vale of Clara Nature Reserve, ensuring that the future of the existing hardwoods. This site is a good example of what remains of the once extensive oak forests of east Wicklow, and is representative of the relatively dry, acid oak woods of eastern Ireland. The woodlands are of considerable conservation significance as they conform to a type listed on Annex I of the E.U. Habitats Directive. The historical record of land use within the woods adds to the interest of the site, as does the occurrence of a number of rare and scarce species.	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000733.pdf
SAC	002274	Wicklow Reef SAC	Stage 1 7718.83 Stage 2 4702.75	**Habitats** 1170 Reefs	Wicklow Reef is situated just to the north of Wicklow Head on the east coast of Ireland in Co. Wicklow. The substrate is a mixture of cobbles, bedrock and sand and is subject to strong tidal streams. Wicklow Reef is an example of a subtidal reef constructed by the honeycomb worm Sabellaria alveolata. In Irish waters this worm normally constructs reefs on intertidal rocks, in areas subject to some sand scour. Such reefs are widespread but uncommon. Sabellaria alveolata subtidal reefs are known to occur in the Mediterranean but this example is an extremely unusual feature and may be the first record for	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002274.pdf

					Britain and Ireland. The reef occurs at a depth of 12-30 m and reaches a thickness of at least 0.3-0.5 m. It is composed of consolidated sand grains formed into a honeycomb structure by the activities of the worm. There is a good diversity of species associated with the reef, including hydroids (e.g. Hydrallmania falcata), a variety of polychaete worms, the snail Calliostoma zizyphinum, the bivalves Musculus discor and Mytilus edulis, other molluscs, bryzoans, barnacles, amphipods, crabs, starfish, brittlestars and sea squirts. Three of the species associated with this biogenic reef are rare in Irish waters. The bryozoan Phaeostachys spinifera is only known from five locations, with the majority on the west coast and no records in the Irish sea south of Co. Antrim. The polychaete Eulalia ornata and the amphipod Unciola crenatipalma are only known from one and two sites respectively in Ireland. Wicklow Reef is of high conservation value as it is the only documented example in Ireland of a biogenic reef. Further, it supports a number of uncommon species.	
SAC	002122	Wicklow Mountains SAC	Stage 1 12558.00 Stage 2 14586.97	**Habitats** 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with Erica tetralix	Wicklow Mountains SAC is a complex of upland areas in Counties Wicklow and Dublin, flanked by the Blessington reservoir to the west and Vartry reservoir in the east, Cruagh Mountain in the north and Lybagh Mountain in the south. Most of the site is over 300 m, with much ground over 600 m. The highest peak is 925 m at Lugnaquilla. The Wicklow uplands comprise a core of granites flanked by Ordovician schists, mudstones and volcanics. The form of the Wicklow Glens is due to glacial erosion. The topography is typical of a mountain	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002122.pdf

				4030 European dry heaths 4060 Alpine and Boreal heaths 6130 Calaminarian grasslands of the Violetalia calaminariae 6230 Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* 7130 Blanket bogs (* if active bog) 8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles	chain, showing the effects of more than one cycle of erosion. The massive granite has weathered characteristically into broad domes. Most of the western part of the site consists of an elevated moorland, covered by peat. The surrounding schists have assumed more diverse outlines, forming prominent peaks and rocky foothills with deep glens. The dominant topographical features are the products of glaciation. High corrie lakes, deep valleys and moraines are common features of this area. The substrate over much of the area is peat, usually less than 2 m deep. Poor mineral soil covers the slopes, and rock outcrops are frequent. The Wicklow Mountains are drained by several major rivers including the Dargle, Liffey, Dodder, Slaney and Avonmore. The river water in the mountain areas is often peaty, especially during floods. Large areas of the site are owned by the National Parks and Wildlife Service (NPWS) and are managed for nature conservation based on traditional land uses of upland areas. The most common land use is traditional sheep grazing, but others include turf cutting, mostly hand-cutting but some machine-cutting also occurs. These activities are largely confined to the Military Road, where there is easy access. Large areas which had been previously hand-cut and are now abandoned are regenerating. In the last 40 years, forestry has become an important land use in the uplands, and has affected both the wildlife and the hydrology of the area. Amenity use is very Version date: 31.05.2017 4 of 4 002122_rev17.docx high, with Dublin city close to the site. Peat erosion is frequent on the peaks. This may be a natural

				Species 1355 Otter *(Lutra lutra)*	process, but is likely to be accelerated by activities such as grazing. Wicklow Mountains is important as a complex, extensive upland site. It shows great diversity from a geomorphological and a topographical point of view. The vegetation provides examples of the typical upland habitats with heath, blanket bog and upland grassland covering large, relatively undisturbed areas. In all, twelve habitats listed on Annex I of the E.U. Habitats Directive are found within the site. Several rare or protected plant and animal species occur, adding further to its value	
SPA	004186	The Murrough SPA	Stage 1 4274.79 Stage 2: 1705.10	Birds A001 Red-throated Diver (Gavia stellata) A043 Greylag Goose (Anser anser) A046 Light-bellied Brent Goose (Branta bernicla hrota) A050 Wigeon (Anas penelope) A052 Teal (Anas crecca) A179 Black-headed Gull (Chroicocephalus ridibundus) A184 Herring Gull (Larus argentatus) A195 Little Tern (Sterna albifrons)	The Murrough SPA comprises a coastal wetland complex that stretches for 13 km from Kilcoole Station, east of Kilcoole village in the north to Wicklow town in the south, and extends inland for up to 1 km in places. The site includes an area of marine water to a distance of 200m from the low water mark. A shingle ridge runs along the length of the site and carries the Dublin-Wexford railway line. The Murrough SPA is an important site for wintering waterbirds, being internationally important for Light-bellied Brent Goose and nationally important for Red-throated Diver, Greylag Goose, Wigeon, Teal, Black-headed Gull and Herring Gull. It is probably the most important site in the country for nesting Little Tern. The regular occurrence of Red-throated Diver, Little Egret, Whooper Swan, Greenland White-fronted Goose, Golden Plover, Little Tern, Sandwich Tern, Short-eared Owl and Kingfisher is of note as these species are listed on Annex I of the E.U. Birds Directive. Part of the Murrough SPA is a Wildfowl Sanctuary.	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004186.pdf

				Habitats Wetlands		
SPA	004127	Wicklow Head SPA	Stage 1 4844.99 Stage 2 2666.62	Birds A188 Kittiwake (Rissa tridactyla)	Wicklow Head is a rocky headland with extensive exposures of mica-schist. It is situated approximately 3 kilometres south of Wicklow town. A lighthouse is located near the base of the cliffs. The cliffs are highest immediately south of the lighthouse where they rise to about 60 m and it is here that most of the seabirds breed. The site comprises the cliffs and cliff-top vegetation, as well as some heath vegetation. The marine area to a distance of 500 m from the base of the cliffs is included in the site. At the time this site was identified for Special Protection Area (SPA) designation it was utilised by a nationally important population of Kittiwake and this species is regarded as a special conservation interest for this SPA. A survey in 2002 recorded a nationally important population of breeding Kittiwake (956 pairs) and other breeding seabirds including Fulmar (62 pairs), Shag (11 pairs), Herring Gull (20 pairs), Guillemot (281 pairs) and Razorbill (125 pairs). A survey of Black Guillemot in April 1998 recorded 70 individual birds within the SPA. The site also supports a pair of breeding Peregrine. Ravens nest annually on the cliffs, and the heath supports such species as Stonechat, Whitethroat and Linnet. The occurrence of Peregrine, a species that is listed on Annex I of the EU Birds Directive, is of note.	https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004127.pdf

4.0 Potential Impacts

This section of the report examines the potential impacts of the - installation, operation and decommissioning of the proposed pipeline– and assesses the impact, without mitigation, on each of the European sites listed above accounting for the qualifying interests and conservation objectives thereof.

Where impacts are determined to be significant (in the absence of mitigation), an Appropriate Assessment will be required.

Some examples of effects that are likely to be significant are:

- Any impact on an Annex I habitat
- Causing reduction in the area of the habitat or Natura 2000 site
- Causing direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the Natura 2000 site
- Causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g. increased noise, illumination and human activity)
- Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site
- Interfering with mitigation measures put in place for other plans or projects

Meanwhile, Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable

The favourable conservation status of a species is achieved when

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable. The favourable conservation status of a species is achieved when:
- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

A review of the potential impacts associated with each stage of the project is first undertaken under section 4.1 before these impacts are then assessed against the individual Natura 2000 sites and their QI's in Table 3 below.

4.1 Potential Impacts of the Project

This section of the report examines the aspects of the project which have the potential to impact on the qualifying interest and conservation objectives of the previously identified Natura 2000 sites within its zone of influence of 15km.

The screening report is based on the following:

- There are no in-stream works completed.
- A contractors compound will be set up at the licenced Ballynagran Landfill site and will be subject to the existing EPA licence requirements in relation to the prevention of nuisance and dust etc.
- Works along the route are planned to be completed in small sections, will be isolated from the public and any surface waters. All materials/ waste will be contained and ensure no nuisance.
- Surface waters are only visible at two crossings, the Ballynagran Landfill Ltd. site crossing and also Woolaghans Bridge. It is anticipated that the pipe will use an existing pipe corridor to bridge the Ballynagran Landfill Ltd. crossing and will be buried in the structure of the roadway/footpath at Woolaghans Bridge. In both cases installation will not involve or impact the waterway underneath.
- There is no removal of scrub or trees anticipated. Where removal is necessary, it shall be completed outside of the nesting season (01st March- 31st August)
- The pipeline will be buried where possible in the hardstand of the road/ pavement or the grass verge where possible or as close thereto.
- The pipeline will be buried to a depth of 1.2 m along the route.
- During operation of the pipeline from Ballynagran Landfill Ltd. to the Uisce Éireann connection point, the pipeline will come under the care, maintenance , management and control of IE licence W0165-02. The licence will likely be amended or reviewed to account for the change.
- During operation of the pipeline from the Uisce Éireann connection point to the final discharge point at the Wicklow WWTP will come under the control, management and maintenance of Uisce Éireann and the EPA issued Wastewater Discharge licence D0012-01.

The potential impacts associated with the various stages of the project are discussed below;

4.1.1 Installation/ Decommissioning Phase

This section of the report examines the potential impacts from the installation/ decommissioning phase of the project which have the potential to impact on the qualifying interests and conservation objectives of the previously identified Natura 2000 sites within its zone of influence of 15km.

Stage1

During the construction/ installation phase of the project the impacts will be short-term and localised.

The contractors compound will be set up within the existing licenced boundary (W0165-02) with materials, installation vehicles and personnel using this area as a base on a daily basis for the project. Where concrete is used for reinstatement, it should be made up and delivered to the roadside. Wash out facilities will be incorporated into the contractors compound, where necessary. As the compound will be within the licenced boundary of the Ballynagran Landfill (IE Licence W0165-02), the requirements of the licence will ensure any potential for environmental pollution and nuisance control associated with the compound are controlled.

The local roads department were engaged to discuss installation techniques and reinstatement requirements. This communication was paused by the roads department awaiting a decision from ABP on the exemption from planning. There are a number of options for installation over the 4 km expanse under discussion, including open-cut, directional drilling and use of existing pipe corridors in portions of the route, with the most likely option being a combination of all three methods. A review of the various methods and anticipated environmental impacts can be found below in order of preference:

Existing Pipe Corridors is the preferred option where available throughout the route. It is anticipated that the existing pipe corridor under the M11 will likely be used to cross this route. TII and BAM were contacted to confirm availability of the pipe for the project. This communication was paused by TII awaiting a decision from ABP on the exemption from planning before continuing discussions.

There are no significant installation environmental impacts associated with this method.

Horizontal directional drilling (HDD) is a trenchless construction method used to install pipes underground without disturbing the ground surface. The drill is launched from one end of the designed bore path and retrieved at the other end, and except for the launch and retrieving spaces above ground, the entire process takes place underground, out of sight.

The environmental impacts of HDD are associated with inadvertent releases of drilling fluids and drilling muds. It is anticipated that a review of the environmental performance appraisal is completed as part of the award of the contractor process. This will account for equipment and overall performance of the contractor to date.

Overall there is no significant impact anticipated with the use of HDD given the distance between the proposed route and associated Natura 2000 sites.

Open-cut is a method of pipeline installation that requires opening up the surface of the ground to the required depth for installing a pipeline. It is a traditional method that is still popular and is used widely for installation and repair or replacement of pipelines

In open cut method of pipeline installation, a trench has to be excavated for installing each piece of pipe. This method can be used for installation as well as rehabilitation of pipeline and requires digging up the ground surface to the required depth in case of installation or digging up to pipeline depth in case of rehabilitation to expose the pipe.

Once the work is complete, the dugout area is backfilled and the surface restored to the original condition as far as possible.

It is anticipated that the open-cut method will be used only where directional drilling, see above, is not an option.

In order to reduce the impact of this work, the project team plan on following the guidance associated with TII. Open-cut will be completed in small sections, with full reinstatement as necessary. All open trenches will be closed and back filled on a daily basis.

Where concrete/ excess material is generated during the project, it will be disposed of in accordance w he appropriate legislation and bye-laws.

Where the M11 bridge crossing is being proposed, approval with Transport Infrastructure Ireland (TII) and BAM Ireland will be sought.

Stage 2

The project will use existing Uisce Éireann infrastructure from the connection point to the final discharge location. Uisce Éireann will manage and control this section of the project to ensure there is no significant impact on its operations, refer to section 2.3 above for further details. Controls which are implemented as part of standard protocols including connection agreements. A copy of an approved and signed agreement is available for review in appendix B.

Stage1

- **Direct Habitat Loss/ or Deterioration**

The proposed project site – both stage 1 and stage 2-is not located in a Natura 2000 site and so no direct habitat loss can occur.

Deterioration of a Natura 2000 site can occur for a number of reasons which include the following Threats & Pressures:

Pressure/Threat categories	Notes on sub-categories
A Agriculture	Includes land conversion, grazi ng, abandonment, burning, enrichment, drainage andas sociatedpollution
B Forestry	Includes land conversion, grazing, forestry management practices such as clear felling, removal of dead wood, burning, enrichment, drainage and associated pollution
C Extractionof resources (minerals, peat, non-renewable energyresources)	Includes geotechnical surveyingpeat extraction and pollution arising from extraction activities
D Energy production processesand related infrastructure development	Includes wind, electricity, oil and gas infrastructure and associated pollution
E Development and operatio of transport systems	Includes roads, paths, shipping lanes and associatedight and noise pollution
F Development, construction and use of residential, commercial, industrial and recreational infastructure and areas	Includes urbanisation, industrialisatio, rereation and associated poll utio
G Extraction and cultivation obiological living resources (other than agriculture and forestry)	Includes hunting, poisoningfish ing, aquaculture and pollution arising from aquaculture
H Military action, public safety measures, and other humanintrusions	Inludes vandalism and disturbance
I Alien and problematic species	Also includes diseases, pathogens and pests
J Mixed source pollution	Where the main driver of pollution is uncertain
K Human-induced changein water regimes	Includes abstrac tionslandfill, modification of water flow
L Natural processes (exaiding catastrophes and processes induced byhuman activ ity oclimate change)	Includes erosionsuccession, competition and predation
M Geological events, natural catastrophes	Includes stormsfloods and fire
N Climate change	Includes temperature rise, drought, sea level rise and increased precipitation
X Unknown pressuresno pressures and pressures from outside the Member State	

Figure 14 Summary of Threats & Pressures associated with Natura 2000 Sites

In this project, the likely threats and pressures which are required to be assessed include:

- **Hydrological Impacts/ surface water run off**

The potential for impacts on surface waters/ groundwaters is low given the limited excavation works to be undertaken on a daily basis, the absence of surface water in the proposed work area, and the distance between the proposed project site and the Natura 2000 sites.

Installation/ Construction activities which have the largest potential to impact surface waters include;

- Runoff of soil/sediment from the site stripping and storage activities.
- Spillages of fuel/ concrete/ other chemicals to ground during the project
- Dust from construction/ demolition activities

Roadside operations will be controlled by implementation of the following as part of the contract conditions:

- Where possible, open cut sections will be limited such that a section is opened and closed on the same day
- Management controls of the site which include ensuring containment by isolation of the site work area from public and surface waters.
- No stockpiles near open drains/ waterways under any circumstance. Stockpiles to be bedded down preventing dust.
- Frequent checks and sign-off of work area throughout the daily operations.
- Dig out and removal of any contaminated soils due to spills. Spill kits should be available as part of the waste lorry being used and should form part of the contract.

The impact of dust from construction and demolition is generally localised (within 50 – 200 meters from the works) with restricted drift beyond this range. The isolation of the work areas will ensure dust is not a significant issue at the roadside.

The impact of dust will also be controlled at the contractors compound by the existing IE Licence at Ballynagran Landfill.

The Decommissioning phase of the project will result in similar impacts as the installation phase of the project.

Operational Phase

This section of the report examines the potential impacts from the operational phase of the project which have the potential to impact on the qualifying interests and conservation objectives of the previously identified Natura 2000 sites within its zone of influence of 15km.

The operational phase of the project will result in treatment of the permeate through a Reverse Osmosis (RO) Plant located at the Ballynagran Landfill. The RO plant produces a maximum of 90m^3 of permeate per day which will be stored in the sites 261 m^3 holding tank prior to discharge. The proposed pipeline will transfer this permeate through a rising main at the Ballynagran Landfill to the approved Uisce Éireann connection point, -6.062, 52.967 approximately 4 km away on the R751 Ballynerrin Upper. The connection offer was received from Uisce Éireann in September 2023 and finalised in December 2023.

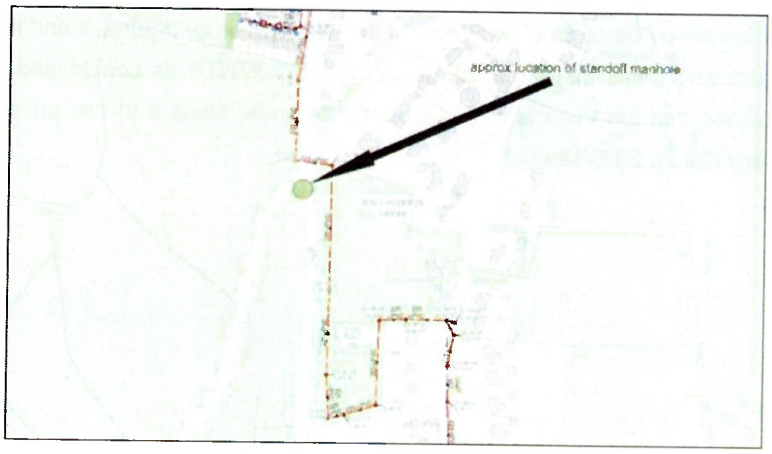


Figure 15 Approved Uisce Éireann Connection Point

The sample of proposed permeate has been analysed, with the final composition being proposed detailed in Appendix C. Monitoring conditions and frequency of monitoring will be accounted for as part of the IE Licence for the Ballynagran Landfill site.

- **Pipe Ownership & Responsibility**

Ballynagran Landfill have communicated the plans for the proposed rising main to the EPA and are currently reviewing updates required to the site's discharge licence either through a technical amendment or full licence review.

- **Reduction in carbon footprint & emissions from the site**

The government published the Climate Action Plan in November 2024. This is a document which sets out the manner in which Ireland will help keep our Earth and ecosystems habitable and functional by limiting temperature rise by 1.5 degrees.

As part of the strategies being implemented, Ireland must reduce our emissions from transport by 50% by 2030.

In this project, the wastewater connection will remove up to 8,000 HGVs from the road network and reduce carbon emissions by an estimated 2,691t CO2 over the life of the landfill.

Overall, this will result in a reduced carbon footprint from the site and a positive impact.

Stage 2

The project will use existing Uisce Éireann infrastructure from the connection point to the final discharge location. Uisce Éireann will manage and control this section of the project to ensure there is no significant impact on its operations, refer to section 2.3 above for further details.

Given there have been no new designations of protected sites in the vicinity of the discharge location since the EPA's Screening for Appropriate Assessment in 2021, together with the quality of the permeate, available capacity in the WWTP, the agreement by Uisce Éireann to accept the wastewater for treatment and the EPA screening for appropriate assessment which was based on the capacity of the WWTP as constructed (which includes this permeate), it is considered that the treatment of this permeate under stage 2 of this project would not have a significant impact on any Natura 2000 site.

Table 3 Assessment of Potential Impacts of Project on QI's of Natura 2000 Sites

Site Type	Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Description of Project Impacts on Natura 2000 site using Source Pathway and Receptor Impact	Potential Significant Impact in the Absence of Mitigation
SAC	000717	Deputy's Pass Nature Reserve SAC	**Habitats** 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles	This SAC is approximately 3.5-6.7 km west of the proposed project and so there will be no direct impacts on the QI's of the SAC. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC, the limited works being proposed on a daily basis and the methods being proposed for isolation of the work areas. Where the contractors compound in the Ballynagran Landfill is used to store materials for this project during the construction phase, the existing licence for the site will ensure controls are implemented to prevent nuisance off-site. Furthermore, there is no evidence of a hydrological connection between the proposed project site and the Deputy's Pass Nature Reserve SAC and so indirect impacts from the project works being proposed can also be excluded. Therefore, this SAC is screened out from further review.	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.
SAC	002249	The Murrough Wetlands SAC	**Habitats** 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi)	The Murrough Wetlands SAC is located approximately 750 m from the Discharge location at Wicklow WWTP in a north direction. The Murrough wetlands are upstream of the discharge location and so cannot be impacted by the permeate or WWTP discharge. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC,	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.

			7210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae* 7230 Alkaline fens	the limited works being proposed on a daily basis and the methods being proposed for isolation of the work areas. Furthermore, there is no evidence of a hydrological connection between stage 1 of the proposed project site and The Murrough Wetlands SAC and so indirect impacts from the project works being proposed can also be excluded. Therefore, this SAC is screened out from further review.	
SAC	001766	Magherabeg Dunes SAC	**Habitats** 1210 Annual vegetation of drift lines 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 7220 Petrifying springs with tufa formation (Cratoneurion)*	The Maherabeg Dunes SAC are located approximately 4km in a south easterly direction from the nearest point on the proposed project route. Each of the potential river crossings on the stage 1 pipeline route are tributaries of the Three Mile Water River which flows through the Maherabeg Dunes SAC. A review of the QI's conservation objectives and overall status associated with the QI was undertaken using the Article 17, 2019 reports. A summary of the QI was undertaken in detail and is available for review in Appendix D along with the site synopsis & conservation objectives of this SAC. The SAC was screened out from further review for stage 1 of the project given the following: Installation: 1. There are no in-stream works planned as part of the project 2. Given the limited daily nature of the works associated with the laying of the pipe including the planned practice to open and close trenches on a daily basis where possible, storage of materials in the licenced landfill and operational controls in line with Uisce Éireann, Transport Infrastructure Ireland (TII)	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.

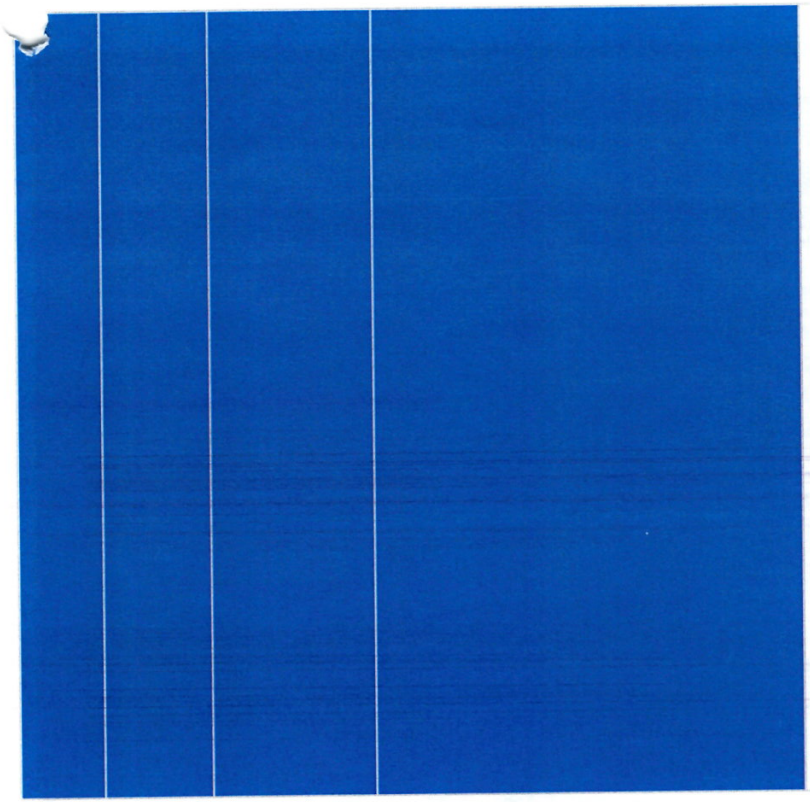
				guidance and stipulations there are no anticipated impacts on water quality as part of this project. 3. The only visible surface water along the route is the crossing associated with the existing licenced Ballynagran Landfill crossing and Woolaghans Bridge. It is proposed to use an existing pipe corridor to cross the bridge at the landfill site with the pipeline being buried in the structure of Woolaghans Bridge. All works at this location will be completed from overhead on the bridge surface. In both cases, there will be no impact on surface waters below. 4. The pipe will be laid alongside/ on the verge of existing roadways which have all previously crossed the rivers without direct impact with surface waters, therefore there is no significant impact anticipated. Operational controls: 1. EPA Licence amendment Water quality of the Three Mile Water River as well as the coastal area is currently ranked as 'high' under the most recent round of the WFD. There is no hydrological connection between stage 2 of the project and this SAC and so this SAC can be screened out.	
SAC	000729	Buckroney-Brittas Dunes and Fen SAC	**Habitats** 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks 1410 Mediterranean salt meadows	This SAC is approximately 7.3-8.0 km south east of the proposed project and so there will be no direct impacts on the QI's of the SAC. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC,	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.

			(Juncetalia maritimi) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea)* 2170 Dunes with Salix repens ssp. argentea (Salicion arenariae) 2190 Humid dune slacks 7230 Alkaline fens	the limited works being proposed on a daily basis and the methods being proposed for isolation of the work areas. Where the contractors compound in the Ballynagran Landfill is used to store materials for this project during the construction phase, the existing licence for the site will ensure controls are implemented to prevent nuisance off-site. Furthermore, there is no evidence of a hydrological connection between the proposed project site & Wicklow WWTP and the Buckroney-Brittas Dunes and Fen SAC and so indirect impacts from the project works being proposed can also be excluded. Therefore, this SAC is screened out from further review.	
SAC	000733	Vale of Clara (Rathdrum Wood) SAC	**Habitats** 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles	The Vale of Clara (Rathdrum Wood) SAC is located approximately 7.5-10 km on from the stage 1 and stage 2 of the project respectively. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC, the limited works being proposed on a daily basis and the methods being proposed for isolation of the work areas. Where the contractors compound in the Ballynagran Landfill is used to store materials for this project during the construction phase, the existing licence for the site will ensure controls are implemented to prevent nuisance off-site. Furthermore, there is no evidence of a hydrological connection between the proposed project site and Vale of Clara SAC and so indirect impacts from the project works being proposed can also be excluded.	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.

				Therefore, this SAC is screened out from further review.	
SAC	002274	Wicklow Reef SAC	**Habitats** 1170 Reefs	The Wicklow Reef SAC is located approximately 4.5 km off shore in the Irish Sea from the proposed Uisce Éireann connection point and 3.5 km from Wicklow WWTP. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC, the limited works being proposed on a daily basis and the methods being proposed for isolation of the work areas. Where the contractors compound in the Ballynagran Landfill is used to store materials for this project during the construction phase, the existing licence for the site will ensure controls are implemented to prevent nuisance off-site. Once the connection point is reached with Uisce Éireann, the permeate will flow through the Uisce Éireann network to the Wicklow WWTP. The latter has been subject to Screening for Appropriate Assessment by the EPA on a number of occasions as part of licence amendments etc. As there are no further changes to the SAC's, SPA's associated with the WWTP, the WWTP is operating within capacity and given the nature of permeate quality, it remains that there is no potential for a significant impact. Therefore, this SAC is screened out from further review.	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.
SAC	002122	Wicklow Mountains SAC	**Habitats** 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3160 Natural dystrophic lakes and	The Wicklow Mountains SAC is located approximately 13 km west of the proposed Uisce Éireann connection point. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC and	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.

			ponds 4010 Northern Atlantic wet heaths with Erica tetralix 4030 European dry heaths 4060 Alpine and Boreal heaths 6130 Calaminarian grasslands of the Violetalia calaminariae 6230 Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* 7130 Blanket bogs (* if active bog) 8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles **Species** 1355 Otter *(Lutra lutra)*	proposed project area and the limited nature of the open cut trenches. Where the contractors compound in the Ballynagran Landfill is used to store materials for this project during the construction phase, the existing licence for the site will ensure controls are implemented to prevent nuisance off-site. Environmental dust from stripping and temporary storage are not anticipated to impact on the QI given the distance between the SAC, the limited works being proposed on a daily basis and the methods being proposed for isolation of the work areas. Where the contractors compound in the Ballynagran Landfill is used to store materials for this project during the construction phase, the existing licence for the site will ensure controls are implemented to prevent nuisance off-site. Furthermore, there is no evidence of a hydrological connection between the proposed project site and the Wicklow Reef SAC and so indirect impacts from the project works being proposed can also be excluded. Therefore, this SAC is screened out from further review.	
SPA	004186	The Murrough SPA	Birds A001 Red-throated Diver (Gavia stellata) A043 Greylag Goose (Anser anser) A046 Light-bellied Brent	The Murrough SPA is located within 150m of the final discharge location at Wicklow WWTP.	No potential for significant impact in the absence of mitigation, therefore it can be screened out from further review.

			Goose (Branta bernicla hrota) A050 Wigeon (Anas penelope) A052 Teal (Anas crecca) A179 Black-headed Gull (Chroicocephalus ridibundus) A184 Herring Gull (Larus argentatus) A195 Little Tern (Sterna albifrons) Habitats Wetlands	Stage 1 of the project relates to the laying of a pipeline between Ballynagran Landfill and Uisce Éireann connection network. The habitat being proposed runs along existing roadways. For the most part, existing pipe runs and hardstands will be utilised throughout the route to accommodate the pipe. There is no plan for removal of scrub or treelines along the route. The roadside habitat associated with the pipeline project would not support the QI's and so the SPA can be screened out from further review. Stage 2 of the project uses existing Uisce Éireann Infrastructure to transport the permeate through the existing sewer network for treatment to Wicklow WWTP. Once the connection point is reached with Uisce Éireann, the effluent will flow through the Uisce Éireann network to the Wicklow WWTP. The latter has been subject to Screening for Appropriate Assessment by the EPA on a number of occasions as part of licence amendments etc. As there are no further changes to the SAC's, SPA's associated with the WWTP, the WWTP is operating within capacity and given the nature of permeate quality, it remains that there is no potential for a significant impact. Therefore, this SAC is screened out from further review.	
SPA	004127	Wicklow Head SPA	Birds A188 Kittiwake (Rissa tridactyla)	Wicklow Head SPA is located approximately 1.5 km from the Uisce Éireann connection point.	No potential for significant impact in the absence of mitigation, therefore it can be

	Stage 1 of the project relates to the laying of a pipeline between Ballynagran Landfill and Uisce Éireann connection network. There is no plan for removal of scrub or treelines along the route. The roadside habitat associated with this project would not be suitable to the Kittwake and so it can be screened out from further review. Stage 2 of the project uses existing Uisce Éireann Infrastructure to transport the permeate through the existing sewer network for treatment to Wicklow WWTP Once the connection point is reached with Uisce Éireann, the effluent will flow through the Uisce Éireann network to the Wicklow WWTP. The latter has been subject to Screening for Appropriate Assessment by the EPA on a number of occasions as part of licence amendments etc. As there are no further changes to the SAC's, SPA's associated with the WWTP, the WWTP is operating within capacity and given the nature of permeate quality, it remains that there is no potential for a significant impact. Therefore, this SAC is screened out from further review.	screened out from further review.

4.2 Likely Cumulative & In-combination Impacts

A review of the planning applications for the last 5 years in the vicinity of the proposed development was undertaken using a combination of myplan.ie and Wicklow County Council e-plan platform.

Other projects assessed include:

- Wicklow County Development Plan
- Planning applications in the area
- Waste Licenced Facilities in the area
- IE Licenced sites in the area
- EPA licence information for Wicklow WWTP, D0012-01

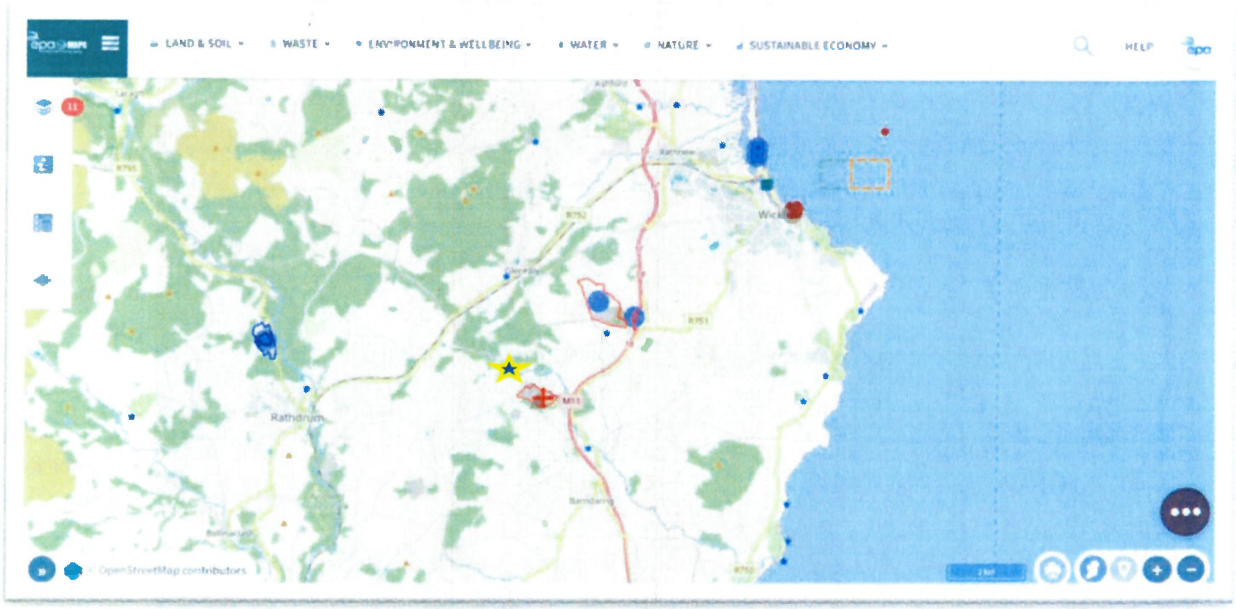


Figure 16 Planning Applications in Vicinity of Project Site

Table 4 Planning Applications in Vcinity of Project Site

File Number	Application Status	Decision Date	Decision Code	Development Address	Development Description	Potential for Cumulative Impact
64	APPLICATION FINALISED	18/02/2020	CONDITIONAL	Coolbeg Wicklow Co. Wicklow	single storey dwelling with well, shared vehicular entrance and for a new wastewater treatment system...	No potential cumulative impact
2021	APPLICATION FINALISED	25/02/2020	UNCONDITIONAL	Ballynagran Landfill Coolbeg Cross Co. Wicklow A67 KF53	extend the appropriate period of a permission - 01/5285 - Engineered Residual Landfill (31 hectares)...	landfill has planning permission to operate until 28/06/2026. Any additional extensions are subject to licence control- W0165-02. No potential cumulative impact.
23798	NEW APPLICATION			Coolbeg Kilbride Co. Wicklow	proposed extension to the side and rear of existing dwelling and associated works...	No potential cumulative impact
2257	APPLICATION FINALISED	20/04/2022	CONDITIONAL	Ballygonnell Wicklow Co. Wicklow	(1) alterations and revisions to the elevations and layout of the as-built dwelling along with services..	No potential cumulative impact
19709	APPLICATION FINALISED	24/09/2019	CONDITIONAL	Ballynerrin Upper Wicklow	minor revisions to development as granted under Planning Reg Reference 18/1193 consisting of miscellaneous...	No potential cumulative impact
20194	APPLICATION FINALISED	17/08/2020	CONDITIONAL	8 Ballynerrin Upper Wicklow Town	extensions and alterations to existing 66.18 sqm dwelling. The works will include the following (1) ...	No potential cumulative impact
20324	APPLICATION FINALISED	30/06/2020	UNCONDITIONAL	Ballynerrin Upper Wicklow	extend the appropriate period of a permission - a dwelling with connection to services, new entrance...	No potential cumulative impact
20495	APPLICATION FINALISED	27/01/2021	CONDITIONAL	Ballynerrin Upper Wicklow Town Co. Wicklow	revisions to development as granted under PRR 18/1193, consisting of revised house types (previously...	No potential cumulative impact

20838	APPLICATION FINALISED	13/10/2020	CONDITIONAL	7 Ballynerrin Upper Wicklow Co. Wicklow	construction of an extension to rear of exiting house and alterations to existing elevations and to ...	No potential cumulative impact
221116	APPLICATION FINALISED	12/12/2022	CONDITIONAL	Ballynerrin Upper Co. Wicklow	proposed new dwelling, new garage, a proposed new secondary treatment system to current EPA guidelines...	No potential cumulative impact
22633	NEW APPLICATION			Ballynerrin Upper Wicklow Co. Wicklow	10 no. Social Housing Units and all associated works. 6 no. two bed two storey housing units and 4 ...	No potential cumulative impact
23520	APPEALED	01/08/2023	CONDITIONAL	Avonvale Manor Ballynerrin Upper Wicklow Co. Wicklow	sought for modifications to approved residential development currently under the course of construction...	No potential cumulative impact
23595	APPLICATION FINALISED	31/08/2023	CONDITIONAL	56 Grahams Court Wicklow Town Co. Wicklow	additions and extensions of 61sqm to existing dwelling comprising: 24sqm hip to gable attic conversion...	No potential cumulative impact
23660	APPLICATION FINALISED	27/11/2023	CONDITIONAL	Ballynerrin Upper Wicklow Town	1. construction of a 350 sq.m. dormer bungalow with basement (on previously approved site), with entrance...	No potential cumulative impact
191077	APPLICATION FINALISED	22/11/2019	REFUSED	Ballyguile Beg Ballyguile Road Co. Wicklow	15 no two storey detached dwelling houses to include 6 no house type A (5 bed), 5 no house type B (4...	No potential cumulative impact
201166	APPLICATION FINALISED	28/05/2021	CONDITIONAL	Ballyguile Beg Ballyguile Road Co. Wicklow	15 no. 4 bedroom detached dwelling houses to include; 4 no. house type A, 4 no. house type B, 2 no. ...	No potential cumulative impact
20806	APPLICATION FINALISED	08/10/2020	CONDITIONAL	Ballyguile Beg Co. Wicklow	new dwelling, garage, secondary effluent treatment system to current EPA guidelines, percolation are...	No potential cumulative impact
211002	APPLICATION FINALISED	09/06/2022	CONDITIONAL	Ballyguile Beg Wicklow Town	for existing dwelling and garage as constructed and all associated site works and services...	No potential cumulative impact

				Co. Wicklow		
21230	APPLICATION FINALISED	21/04/2021	UNCONDITIONAL	Ballyguile Beg Wicklow Town Co. Wicklow	extend the appropriate period of 15/595 - 30 dwellings, comprising of 4 no. 2 bed terraced, 2 no. 3 ...	No potential cumulative impact
21567	APPLICATION FINALISED	01/07/2021	CONDITIONAL	Yellow Meadows Ballyguile Beg Wicklow Town Co. Wicklow	change existing single storey bungalow into a storey and a half dormer type dwelling with a first floor...	No potential cumulative impact
2184	APPLICATION FINALISED	26/03/2021	CONDITIONAL	Ballyguile Beg Wicklow Town Co. Wicklow	revisions and alterations to development as granted under PRR 15/595 (ABP PL27.245688) (under construction...	No potential cumulative impact
2332	APPLICATION FINALISED	09/03/2023	CONDITIONAL	Yellow Meadows Ballyguile Beg Wicklow Town Co. Wicklow	convert existing attic space and extend same, provide dormers to same, erect a single storey flat roof...	Nopotential cumulative impact

Following a review of the above finalised, approved and new applications in the townlands of

- Coolbeg
- Ballygonnell
- Ballynerrin Upper
- Ballyguile Beg

all of which line the proposed pipeline route, there are no likely or in-combination impacts anticipated.

Stage 2 of the project relates to the Uisce Éireann owned infrastructure. It has been determined that the plant at Wicklow WWTP has sufficient capacity to accommodate the permeate from Ballynagran WWTP. This has been determined by Uisce Éireann. Furthermore, the EPA have assessed the maximum capacity of the WWTP prior to being licenced, and at each subsequent technical amendment and have concluded that the WWTP and its operations will not impact on Natura 2000 sites within the zone of interest.

Assuming additional loads to the network are assessed in a similar manner as this application and assuming the WWTP continues to operate within capacity, it is considered that stage 2 of the project will not have a significant impact on any Natura 2000 sites within its zone of influence.

5.0 Screening Conclusion

This updated Screening for Appropriate Assessment was generated to inform the appeal associated with a Section 5 refusal by Wicklow County Council and a subsequent information request from ABP for a proposed wastewater connection to transport permeate originating from Ballynagran Landfill to the Uisce Éireann Wicklow wastewater treatment plant discharge location.

The AA screening demonstrates that the implementation of the proposed project will not result in adverse effects to the ecological integrity of any European sites.

Using the relevant guidance and the source-pathway receptor model, European sites within and bordering a 15km Zone of influence of the proposed project were assessed for the potential impact on the qualifying interests and conservation objectives of the European sites.

Following a Stage 1 assessment, it can be concluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed development, individually or in combination with other plans and projects, would not be likely to have a significant effect on any European sites.

Therefore, it is proposed that a stage 2, Appropriate Assessment of the activity is not required for this development.

6.0 References

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EPA Maps (2022) Site map, available: https://gis.epa.ie/EPAMaps/ [accessed 12/04/2024].

European Commission (2001), Assessment of Plans and Projects significantly affecting Natura 2000 sites- Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, available Assessment of plans and projects significantly affecting Natura 2000 sit\ es: Methodological guidance on the provisions of Article 6(3)and (4)\ of the Habitats Directive 92/43/EEC (europa.eu), [accessed 12/04/2024].

European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011), available S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011. (irishstatutebook.ie), [accessed 12/04/2024].

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OSI maps (2020) Site map, available: http://map.geohive.ie/mapviewer.html [12/04/2024].

Smith, G.F., O' Donoghue, P., O'Hora, K., Delaney, E. (2011). Best Practice Guidance for Habitat and Survey Mapping. Heritage Council, Kilkenny.

Appendix A

ABP Letter, Declaration Refusal from Wicklow County Council & Uisce Éireann Connection Details

Our Case Number: ABP-319561-24

Planning Authority Reference Number: EX17/2024

Your Reference: Ballynagran Landfill Limited

An Bord Pleanála

Genesis Planning Consultants
Dean Swift Building
Armagh Business Park
Hamiltonsbawn Road
Armagh
BT60 1HW
Northern Ireland

Date: 27 March 2025

Re: Whether the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper along the local road L1113, crossing the N11 and R751 is or is not development or is or is not exempted development
Ballynagran to Ballynerrin Upper, Co. Wicklow

Dear Sir / Madam,

I have been asked by An Bord Pleanála to refer to the above-mentioned referral.

The Board has examined the referral and is of opinion that certain information is necessary for the purpose of enabling it to determine it.

In accordance with section 132 of the Planning and Development Act, 2000, (as amended), as applied to referrals you are required to submit, on or before **23rd April 2025** the following.

- **Details of the expected concentration ranges of the treated leachate permeate for relevant parameters having particular regard to hazardous substances.**

- **Details of the destination wastewater treatment plant (WWTP) to which the treated leachate permeate is to be piped to and its ultimate discharge location.**

- **Demonstration that the WWTP has the capability to treat the permeate to the necessary standard such that its subsequent discharge will not affect the integrity of any European site.**

Teil	**Tel**	(01) 858 8100
Glao Áitiúil	**LoCall**	1800 275 175
Facs	**Fax**	(01) 872 2684
Láithreán Gréasáin	**Website**	www.pleanala.ie
Ríomhphost	**Email**	bord@pleanala.ie

64 Sráid Maoilbhríde
Baile Átha Cliath 1
D01 V902

64 Marlborough Street
Dublin 1
D01 V902

- **An updated AA screening report which addresses the destination and treatment of the permeate.**

If the information required is not received before the end of the specified period, the Board will dismiss or otherwise determine the referral without further notice to you in accordance with section 133 of the 2000 Act, (as amended), as applied to referrals. Your submission should be received by the Board not later than 5.30 p.m. on the date specified above.

Please note when making a response/submission only to the referral it may be emailed to appeals@pleanala.ie and there is no fee required.

Please quote the above referral number in any further correspondence.

Yours faithfully,

Catherine Flynn
Executive Officer
Direct Line: 01-8737143

BPRL71 Registered Post

Teil	**Tel**	(01) 858 8100
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D01 V902

64 Marlborough Street
Dublin 1
D01 V902

Comhairle Contae Chill Mhantáin
Wicklow County Council

Plea nál, Forbai rtEacnamaíochta agus Tuaithe
Plan ning, Ecomomic an d Rural Development

Áras An Chontae/ County Buildings
Cill Mhantáin / Wicklow
Guthán / Tel: (0404) 20148
Faics / Fax: (0404) 69462
Rphost / Email: pandev@wicklo wcoco.
Suíomh / Website: www.wicklow.ie

Damine Holmes
Ballynagran Landfill
Coolbeg Cross
Co. Wicklow

21st March 2024

RE: Declaration in accordance with Section 5 of the Planning & Development Acts 2000 (As Amended) – EX17/2024 – Bal lynagran Landfill Ltd

I enclose herewith Declaration in accordance with Article 5 (2) (A) of the Planning & Development Act 2000.

Where a Declaration is used under this Section any person issued with a Declaration u nder subsection (2) (a) may, on payment to An Bord Pleanala of such fee as may be prescribed, refer a declaration for review by the Board within four weeks of the date of the issuing of the declaration by the Local Authority.

Is mise, le meas,

AD MNI STRA TIVE OFFICER
PLAN NNG ECONOMIC & RURAL DEVELOPMENT

Comhairle Contae Chill Mhantáin
Wicklow County Council

Pleanáil, Forbairt Eacnamaíochta agus Tuaithe
Planning, Economic and Rural Development

Áras An Chontae / County Buildings
Cill Mhantáin / Wicklow
Guthán / Tel: (0404) 20148
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Suíomh / Website: www.wicklow.ie

Akhil Thadathil Rooby
Fingleton White
Unit 21, Beckett Way
Park West Business Park
Dublin 12
D12 C9YE

21st March 2024

RE: Declaration in accordance with Section 5 of the Planning & Development Acts 2000 (As Amended) – EX17/2024 – Ballynagran Landfill Ltd

I enclose herewith Declaration in accordance with Article 5 (2) (A) of the Planning & Development Act 2000.

Where a Declaration is used under this Section any person issued with a Declaration under subsection (2) (a) may, on payment to An Bord Pleanala of such fee as may be prescribed, refer a declaration for review by the Board within four weeks of the date of the issuing of the declaration by the Local Authority.

Is mise, le meas,

ADMINISTRATIVE OFFICER
PLANNING ECONOMIC & RURAL DEVELOPMENT

Comhairle Contae Chill Mhantáin
Wicklow County Council

Pleanáil, Forbairt Eacnamaíochta agus Tuaithe
Planning, Economic and Rural Development

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Rphost / Email: plandev@wicklowcoco.ie
Suíomh / Website: www.wicklow.ie

DECLARATION IN ACCORDANCE WITH ARTICLE 5 (2) (A) OF THE PLANNING & DEVELOPMENT ACT 2000 AS AMENDED

Applicant: Ballynagran Landfill Ltd

CHIEF EXECUTIVE ORDER NO. CE/PERD/372/2024

A question has arisen as to whether "the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751" is or is not exempted development.

Having regard to:

- The details submitted with the Section 5 application.
- Planning History PL 27.1311213(PRR 01/5285), PRR 20/21 , PRR 12/6581,PRR 08/1209
- EX 40/2023
- Wicklow Town-Rathnew Development Plan 2013-2019
- Section 2, 3 , 4 of the Planning and Development Act 2000(as amended)
- Article 6,9 and Schedule 2: Part 1 : Class 48 and Class 54 of the Planning and Development Regulations 2001(as amended).

Main Reasons with respect to Section 5 Declaration:

- The laying of a rising main would come within the definition of works and is therefore development having regard to Section 3 of the Planning and Development Act 2000(as amended).
- Having regard to
  - i. the extent and type of the works i.e. the construction/ excavation and laying of a sewer underground over 3.7km,
  - ii. the location of the works mainly within the rural area and outside the development boundary of Wicklow Town
  - iii. the definition of street i.e. a public road that is usually lined with buildings (Collins Dictionary).
  - iv. Class 58, Part1 : Schedule 2 of the Planning and Development Regulations 2001(as amended), which specifically provides for an exemption for Irish Water to
    - *i. underground pipes, cables, water mains, sewers, including associated accessories, service connections, boundary boxes and meters, and, the excavation of any street or other land for that purpose;*
  - *v.* The description under Class 48 : Part1 : Schedule 2 of the Planning and Development Regulations 2001(as amended), i.e. *The connection of any premises to a wired broadcast relay service, sewer, watermain, gas main or electricity supply line or cable, including the breaking open of any street or other land for that purpose.*

It is considered that the scale and type of the works proposed would not come within the description set out under Class 48, and therefore the works would not be exempted development.

The Planning Authority considers that "the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751" **is development and is not exempted development**

Signed: _____

ADMINISTRATIVE OFFICER
PLANNING ECONOMIC & RURAL DEVELOPMENT

Dated 21st March 2024

WICKLOW COUNTY COUNCIL

PLANNING & DEVELOPMENT ACTS 2000 (As Amended)
SECTION 5

CHIEF EXECUTIVE ORDER NO. CE/PERD/372/2024

Reference Number:	EX17/2024
Name of Applicant:	Ballynagran Landfill Ltd
Nature of Application:	Section 5 Referral as to whether or not "the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751" is or is not development and is or is not exempted development.

Report from Edel Bermingham SEP

With respect to the query under section 5 of the Planning & Development Act 2000 as to whether "the laying of rising main between Ballynagran Landfil to Uisce Eireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751" is or is not exempted development within the meaning of the Planning & Development Acts 2000 (as amended).

Having regard to

- The details submitted with the Section 5 application.
- Planning History PL 27.1311213(PRR 01/5285), PRR 20/21, PRR 12/6581,PRR 08/1209
- EX40/2023
- Wicklow Town-Rathnew Development Plan 2013-2019
- Section 2, 3, 4 of the Planning and Development Act 2000(as amended)
- Article 6 and Schedule 2: Part 1 : Class 48 and Class 54 of the Planning and Development Regulations 2001(as amended).

Main Reason with respect to Section 5 Declaration:

- The laying of a rising main would come within the definition of works and is therefore development having regard to Section 3 of the Planning and Development Act 2000 (as amended).
- Having regard to
  - i. the extent and type of the works i.e. the construction/ excavation and laying of a sewer underground over 3.7 km,
  - ii. the location of the works mainly within the rural area and outside the development boundary of Wicklow Town
  - iii. the definition of street i.e. a public road that is usually lined with buildings(Collins Dictionary).
  - iv. Class 58, Part1 : Schedule 2 of the Planning and Development Regulations 2001(as amended), which specifically provides for an exemption for Irish Water to *underground pipes, cables, water mains, sewers, including associated accessories, service connections, boundary boxes and meters, and, the excavation of any street or other land for that purpose;*

v. The description under Class 48 : Part1 : Schedule 2 of the Planning and Development Regulations 2001(as amended), i.e. *The connection of any premises to a wired broadcast relay service, sewer, watermain, gas main or electricity supply line or cable, including the breaking open of any street or other land for that purpose.*

It is considered that the scale and type of the works proposed would not come within the description set out under Class 48, and therefore the works would not be exempted development.

Recommendation:
The Planning Authority considers that "the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751"**is development and is not exempted development** as recommended in the report by the SEP.

Signed: _____ Dated 21st day of March 2024

ORDER:
I HEREBY DECLARE:
That "the laying of rising main between Ballynagran Landfill to Uisce Eireann connection point at Ballynerrin Upper, along the local road L1113, crossing the N11 and R751" **is development and is not exempted development** within the meaning of the Planning & Development Act 2000 (as amended).

Signed: _____ Dated 21st day of March 2024
Senior Engineer
Planning, Economic & Rural Development

Section 5 Application : EX 17/2024

Date : 15th March 2024.

Applicant : Ballynagran Landfill Ltd

Address : Ballynagran Landfill, Coolbeg Cross, Co. Wicklow

Exemption Whether or not :

The laying of rising main between Ballynagran landfill to Uisce Eireann connection point at Ballynerrin Upper , along the local road L1113 , crossing the N11 and R751

constitutes exempted development within the meaning of the Planning and Development Acts, 2000(as amended).

Planning History

Section 5 Declarations

EX 40/2023 _Declaration
The addition of a pre-fabricated , containerised pump skid located on an existing concrete plinth, and laying of rising main between the pump skid and the property boundary to connect to sewer **is development and is NOT exempted development**

Main Reasons with respect to Section 5 Declaration:

- The provision of a pump skid and rising main would come within the definition of works and are therefore development having regard to Section 3 of the Planning and Development Act 2000(as amended).
- The current site was permitted and operates a residual landfill as permitted by reference to PL 27.1311213(PRR 01/5285).
- The usage of the lands as a landfill would not it is considered come within the definition of an industrial process as it is not incidental to the making of an article or part of an article. Neither is the use as a landfill considered incidental to the breaking up or demolition of an article, as the usage is for the deposition of non-hazardous materials and would not be an industrial process, and the operator would not come within the definition of an industrial undertaker. Therefore the development would not come within the description set out under Class 21:Part1: Schedule 2 of the Planning and Development Regulations 2001 (as amended) as it is not works by an industrial undertaker for an industrial process.

- Class 48: Part 1 : Schedule 2 of the Planning and Development Regulations 2001 (as amended) allows for the connection of a premises to a sewer, however there is no evidence that there is a sewer available at the location indicated, and therefore it is not evident the premises is being connected to a sewer.

Planning Applications

PRR 20/21 Permission granted to extend appropriate period of PL 27.1311213(PRR 01/5285) for a period of 5 years.

PRR 12/6581 Permission for increasing the infrastructure at the existing landfill gas utilisation plant.

PRR 08/1209 Permission granted for

(1) construction of new security kiosk (approx 9 sqm) 92) remove the regional restriction on the origin of the waste accepted at the facility by modification condition number 3(1) of Permission Reg Ref No 01/5285 so that the facility can accept waste from other waste regions. Access is at the existing permitted access at Coolbeg Road (L1113). The proposed development relates to an activity covered by Waste Licence Ref No W165-01 issued by the Environmental Protection Agency. The proposed development will not require a review of the Waste Licence.

PL 27.1311213(PRR 01/5285)

Permission granted for an engineered residual landfill (area 31 hectares, height 18 metres) to accept 180,000 tonnes per annum of non-hazardous waste for 15 years at a 128 hectare site in the townlands of Ballynagran, Coolbeg and Kilcandra, County Wicklow.

Relevant Legislation

Planning and Development Act 2000 (as amended)

Section 2 of the Planning and Development Act 2000:

"works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.

Section 3 :

3.—(1) In this Act, "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.

(2) For the purposes of *subsection (1)* and without prejudice to the generality of that subsection—

(*a*) where any structure or other land or any tree or other object on land becomes used for the exhibition of advertisements, or

Section 4

4.—(1) The following shall be exempted developments for the purposes of this Act—

(2) (*a*) The Minister may by regulations provide for any class of development to be exempted development for the purposes of this Act

(4) Notwithstanding paragraphs (*a*), (*i*), (*ia*) and (*l*) of subsection (1) and any regulations under subsection (2), development shall not be exempted development if an environmental impact assessment or an appropriate assessment of the development is required.

Planning and Development Regulations 2001(as amended).

Article 5
"business premises" means—
(a) any structure or other land (not being an excluded premises) which is normally used for the carry undertaking or any structure (not being an excluded premises) which is normally used for the provis
(b) a hotel, hostel (other than a hostel where care is provided) or public house, or
(c) any structure or other land used for the purposes of, or in connection with, the functions of a State authority;
"industrial process" means any process which is carried on in the course of trade or business, other than agriculture, and which is-
(a) for or incidental to the making of any article or part of an article, or for or incidental to the altering, repairing, ornamenting, finishing, cleaning, washing, packing, canning, adapting for sale, breaking up or demolition of any article, including the getting, dressing or treatment of minerals, and for the purposes of this paragraph, "article" includes-
(i) a vehicle, aircraft, ship or vessel, or
(ii) a sound recording, film, broadcast, cable programme, publication and computer program or other original database;
"industrial undertaker" means a person by whom an industrial process is carried on
and "industrial undertaking" shall be construed accordingly

Article 6
(1) Subject to article 9, development of a class specified in column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1.

Article 9(1) - Note see Regulations for full Article
Development to which article 6 relates shall not be exempted development for the purposes of the Act—
(a) if the carrying out of such development would—

(i) contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act,

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment

(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.

Schedule 2, Part 1

Class 48

The connection of any premises to a wired broadcast relay service, sewer, watermain, gas main or electricity supply line or cable, including the breaking open of any street or other land for that purpose.

Class 58

Development by Irish Water for the purpose of provision of water services, consisting of one or more of the following :

(b) the installation of either or both—

(i) underground pipes, cables, water mains, sewers, including associated accessories, service connections, boundary boxes and meters, and,

(ii) above ground kiosks, meters and other apparatus and overhead wires,

including the excavation of any street or other land for that purpose;

Limitation

The volume above ground level of any such kiosk, meter or other apparatus shall not exceed 13 cubic metres in rural areas (being areas as defined in Article 6(3)) or 2 cubic metres in other areas, measured externally.

Submission :

Pipeline to be provided running from Ballynagran Landfill Ltd to Uisce Eireann connection point . The pipe line would run along roads L1113, crossing M11 using the existing pipe corridor and R751.

Assessment ·.

The declaration queries whether the laying of rising main between Ballynagran landfill to Uisce Eireann connection point at Ballynerrin Upper (3.7km) , along the local road L1113 , crossing the N11 and R751 is or is not exempted development.

The current site operates as an engineered residual landfill , and is for the acceptance of non-hazardous waste as permitted by reference to PL 27.1311213(PRR 01/5285). This proposal will connect the landfill to the mains sewer at a distance of c. 3.7km to the east at the townland of Ballynerrin Upper. To facilitate the laying of the rising main would require works including the excavation of trenches, laying of rising main within the excavated trench, filling in , and relaying of the public road finish.

As the proposal would involve works of excavation and construction, therefore the laying of rising main would be development having regard to the definition set out under Section 3(1) of the Planning and Development Act 2000(as amended) .

The exemption to which the agents consider the works come within is Schedule 2 : Part 1 : Class 48 ie.

> T heconnection of any premises to a wired broadcast relay service, sewer, watermain, gas main or electricity supply line or cable, including the breaking open of any street or other land for that purpose.

A street is defined as a public road that is usually lined with buildings (Collins Dictionary), and thus it is clearly identifiable as urban in nature. The context is clearly for connections within the urban setting, which would be logical as such services would mainly be within existing agglomerations. The current proposal extends over a distance of 3.7km, with the majority of works being located outside the development boundary of Wicklow Town as identified in the Wicklow Town–Rathnew Development Plan 2013-2019, and as such are within the rural area. The scale / extent/ type of works proposed and the location of the works required to facilitate the connection would not it is considered be of a type that would come within the description or be envisaged as part of the connection under this exemption. This consideration is further supported by the specific exemption for Irish Water (Uisce Eireann) Class 58, which specifically provides for

> *underground pipes, cables, water mains, sewers, including associated accessories, service connections, boundary boxes and meters, and, the excavation of any street or other land for that purpose;*

Accordingly, given the scale of the works, the description of the exemption as set out under Class 48, and the specific exemption for Irish Water for underground piping and excavation for the provision of water services, it is considered that the laying of the Rising Main would not be exempted development.

Recommendation :

With respect to the query under Section 5 of the Planning and Development Act 2000, as to whether thethe laying of rising main between Ballynagran landfill to Uisce Eireann connection point at Ballynerrin Upper (3.7km) , along the local road L1113 , crossing the N11 and R751 is or is not exempted development .

The Planning Authority considers that:

The laying of rising main between Ballynagran landfill to Uisce Eireann connection point at Ballynerrin Upper (3.7km) , along the local road L1113 , crossing the N11 and R751 **is development and is NOT exempted development**

Main Considerations with respect to Section 5 Declaration:

- The details submitted with the Section 5 application.
- Planning History PL 27.1311213(PRR 01/5285), PRR 20/21 , PRR 12/6581,PRR 08/1209
- EX 40/2023
- Wicklow Town-Rathnew Development Plan 2013-2019
- Section 2, 3 , 4 of the Planning and Development Act 2000(as amended)
- Article 6,9 and Schedule 2: Part 1 : Class 48 and Class 54 of the Planning and Development Regulations 2001(as amended).

Main Reasons with respect to Section 5 Declaration:

- The laying of a rising main would come within the definition of works and is therefore development having regard to Section 3 of the Planning and Development Act 2000(as amended).
- Having regard to
  - i. the extent and type of the works i.e. the construction/ excavation and laying of a sewer underground over 3.7km,
  - ii. the location of the works mainly within the rural area and outside the development boundary of Wicklow Town
  - iii. the definition of street i.e. a public road that is usually lined with buildings (Collins Dictionary).
  - iv. Class 58, Part1 : Schedule 2 of the Planning and Development Regulations 2001(as amended), which specifically provides for an exemption for Irish Water to *underground pipes, cables, water mains, sewers, including associated accessories, service connections, boundary boxes and meters, and, the excavation of any street or other land for that purpose;*
  - v. The description under Class 48 : Part1 : Schedule 2 of the Planning and Development Regulations 2001(as amended), i.e. *The connection of any premises to a wired broadcast relay service, sewer, watermain, gas main or electricity supply line or cable, including the breaking open of any street or other land for that purpose.*

It is considered that the scale and type of the works proposed would not come within the description set out under Class 48, and therefore the works would not be exempted development.

Edel Bermingham SEP.

15/3/2024

Issue declaration as recommended
Nigel T Ming 2 82
21/3/24

MEMORANDUM

WICKLOW COUNTY COUNCIL

TO: **Edel Bermingham**
Senior Executive Planner

FROM: **Nicola Fleming**
Staff Officer

RE:- **Application for Certificate of Exemption under Section 5 of the Planning and Development Acts 2000 (as amended).**
EX17/2024

I enclose herewith application for Section 5 Declaration received 1st March 2024.

The due date on this declaration is 28th March 2024.

Staff Officer
Planning Economic & Rural Development

Comhairle Contae Chill Mhantáin
Wicklow County Council

Forbairt Pleanála agus Comhshaol
Planning Development and Environment

Áras An Chontae / County Buildings
Cill Mhantáin / Wicklow
Guthán / Tel: (0404) 20148
Faics / Fax: (0404) 69462
Rphost / Email: plandev@wicklowcoc
Suíomh / W[illegible]e: www.wicklow.ie

5th March 2024

Akhil Thadathil Rooby
Fingleton White
Unit 21, Beckett Way
Park West Business Park
Dublin 12
D12 C9YE

RE: Application for Certificate of Exemption under Section 5 of the Planning and Development Acts 2000 (as amended). – EX17/2024 – Ballynagran Landfill Ltd

A Chara

I wish to acknowledge receipt on 01/03/2024 details supplied by you in respect of the above Section 5 application. A decision is due in respect of this application by 28/03/2024.

Mise, le meas

NICOLA FLEMING
STAFF OFFICER
PLANNING ECONOMIC & RURAL DEVELOPMENT

Wicklow County Council
County Buildings
Wicklow
0404-20100

01/03/2024 15 04 34

Receipt No L1/0/326116

BALLYNAGRAN LANDFILL LTD
COOLBEG CROSS
CO WICKLOW

EXEMPTION CERTIFICATES		80 00
GOODS	80 00	
VAT Exempt/Non-vatable		

Total	80 00 EUR

Tendered	
Cash	80 00

Change	0 00

Issued By Cashier5MW
From Customer Service Hub
Vat reg No 0015233H

Wicklow County Council
County Buildings
Wicklow
Co Wicklow
Telephone 0404 20148
Fax 0404 69462

Office Use Only

Date Received _____

Fee Received _____

APPLICATION FORM FOR A DECLARATION IN ACCORDANCE WITH SECTION 5 OF THE PLANNING & DEVELOPMENT ACTS 2000(AS AMENDED) AS TO WHAT IS OR IS NOT DEVELOPMENT OR IS OR IS NOT EXEMPTED DEVELOPMENT

1. Applicant Details

(a) Name of applicant: Ballynagran Landfill Ltd
Address of applic ant Ballynagran Landfill Ltd, Coolbeg Cross, Co. Wicklow

Note Phone number and email to be filled in on separate page.

2. Agents Details (Where Applicable)

(b) Name of Agent (where applicable) Akhil Thadathil Rooby

Address of Agent : Fingleton White, Unit 21, Beckett Way Park West Business Park, Dublin 12. D12 C9YE

Note Phone number and email to be filled in on separate page.

3. Declaration Details

i. Location of Development subject of Declaration Pipeline running from Ballynagran Landfill Ltd (52.954239, -6.103586) to Uisce Éireann Connection point (52.954247, -6.105508).The pipeline would run along the roads L1113, crossing M11 using the existing pipe corridor (ongoing discussions with TII and BAM) and R751

ii. Are you the owner and/or occupier of these lands at the location under i. above ? Yes/ **No**.

iii. If 'No' to ii above, please supply the Name and Address of the Owner, and or occupier Damien Holmes, Ballynagran Landfill, Coolbeg Cross, Co. Wicklow

iv. Section 5 of the Planning and Development Act provides that : If any question arises as to what, in any particular case, is or is not development and is or is not exempted development, within the meaning of this act, any person may, an payment of the prescribed fee, request in writing from the relevant planning authority a declaration on that question. You should therefore set out the query for which you seek the Section 5 Declaration We would like to seek confirmation that laying a rising main between Ballynagran Landfill and the Uisce Éireann (UÉ) Connection point is exempt under Class 48 of the Planning and Development Regulations as it is "the connection of a premises to a sewer". We have signed a connection agreement with UÉ for the proposed pipeline connection to the UÉ connection point at (52.954247, -6.105508). The connection offer number is CDS2200803901

Additional details may be submitted by way of separate submission.

v. Indication of the Sections of the Planning and Development Act or Planning Regulations you consider relevant to the Declaration
Class 48 of the Schedule 2 Exempted Development - General

Additional details may be submitted by way of separate submission.

vi. Does the Declaration relate to a Protected Structure or is it within the curtilage of a Protected Structure (or proposed protected structure) ? No

vii. List of Plans, Drawings submitted with this Declaration Application
Pipeline route drawing, UE Connection Agreement

viii. Fee of € 80 Attached ? YES

Signed : David Thurlbeck Rocky Dated : 29/02/2024

Additional Notes :

As a guide the minimum information requirements for the most common types of referrals under Section 5 are listed below :

A. Extension to dwelling - Class 1 Part 1 of Schedule 2

- Site Location Map
- Floor area of structure in question - whether proposed or existing.
- Floor area of all relevant structures e.g. previous extensions.
- Floor plans and elevations of relevant structures.
- Site Layout Plan showing distance to boundaries, rear garden area, adjoining dwellings/structures etc.

B. Land Reclamation -

The provisions of Article 8 of the Planning and Development Regulations 2001 (as amended) now applies to land reclamation, other than works to wetlands which are still governed by Schedule 2, Part 3, Class 11. Note in addition to confirmation of exemption status under the Planning and Development Act 2000(as amended) there is a certification process with respect to land reclamation works as set out under the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011 S.I. 456 of 2011. You should therefore seek advice from the Department of Agriculture, Fisheries and Food.

Any Section 5 Declaration should include a location map delineating the location of

and exact area of lands to be reclaimed, and an indication of the character of the land.

C. Farm Structures - Class 6 -Class 10 Part 3 of Schedule 2.

- Site layout plan showing location of structure and any adjoining farm structures and any dwellings within 100m of the farm structure.
- Gross floor area of the farm structure
- Floor plan and elevational details of Farm Structure and Full details of the gross floor area of the proposed structure.
- Details of gross floor area of structures of similar type within the same farmyard complex or within 100metres of that complex.

ADDITIONAL CONTACT INFORMATION
NOT TO BE MADE AVAILABLE WITH APPLICATION

Michelle MacLennan
C/O Stephen Morrin
Fingleton White
Unit 21,
Beckett Way,
Park West Business Park.
D12C9YE

Uisce Éireann
Bosc[illegible] 448
Oifig [illegible] Átha na
Cath[illegible]
Cath[illegible]

Irish Water
PO B[illegible]
South[illegible]
Deliv[illegible]
Cork[illegible]

www.water.ie

CONNECTION OFFER

To: Ballynagran Landfill LTD
Coolbeg Cross
Wicklow
A67KF53
(the "**Customer**")

Our Ref: **CDS2200803901**

Connection Agreement – Ballynagran Landfill Ltd, Coolbeg Cross,, Wicklow

Date: 1 September 2023

SUBJECT TO CONTRACT

Dear Applicant,

Outcome of your Connection Application - Summary

We have completed the review of your Connection Application.

Irish Water has reviewed your application for connection(s) to the Network(s). Based upon the details provided by you, Irish Water can offer you a connection(s) in accordance with the terms of this Connection Offer.

Where can you find more information?

You can find more information about the terms of your Connection Offer in this **Connection Offer letter** and enclosures. Please read this Connection Offer letter and the following enclosed documents, in particular:

- General Conditions (Appendix 2)
- Special Conditions (Appendix 3)

If you have any queries in relation to this Connection Offer, please contact our Customer Service Department at:

Telephone: 1800 278 278 or +353 1 707 2828

Email: newconnections@water.ie

Web: www.water.ie/contact-us

Michelle MacLennan

From: newconnections <newconnections@water.ie>
Sent: Tuesday 2 January 2024 17:02
To: Michelle MacLennan
Subject: RE: CDS2200803901 - Ballynagran Landfill Ltd, Coolbeg EMAIL:0585539

Follow Up Flag: Follow up
Flag Status: Completed

Dear Michelle,

I tried to contact you, but you were unavailable to take the call. The call was to thank you and to confirm that we have received your payment and signed counterpart (Acceptance Letter) for the above stated New Connection application.

In order for your connection works to take place, you are required to have your private side works completed i.e. the pipework brought to the boundary of your property on the private side. It is important that you advise us if this has already been completed, or when you expect this to be completed, as soon as you are in a position to do so. The date of the completion or expected completion of these private side works, is referred to as the "Target Start Date", which is a date by which you are committed to being ready for final connection works to take place. Once we are informed of the Target Start Date, we will then update the regional contractor/local field engineer accordingly.

Once the Target Start Date is provided by you via email or by phone, a Road Opening Licence (ROL), which is normally required, will be applied for to the Local Authority Roads Department by our regional contractor/local field engineer. This licence can take a number of weeks to process and be granted by the Local Authority Roads Department depending on the specific requirements of the connection. Therefore the delivery of connection works can be impacted by the ROL application process.
Once this licence is granted, the regional contractor/local field engineer can provisionally schedule your connection date, which can be on average of 12 weeks from the date of the Road Opening Licence being granted.
Please bare in mind, the Road Opening Licence can take on average 6 weeks to be granted and is outside of the control of Uisce Éireann.

When the necessary designs are completed and all approvals are in place, you will be contacted approximately 14 days prior to the commencement of works.
Please inform us of your Target Start Date by responding to this email or by phoning the New Connections team on 1800 278 278. Once it is confirmed by you, the Road Opening Licence application process can commence and not before.
Note: In the event that a Conformance Cert is a condition of your connection agreement, the connection works cannot proceed until this is in place.

Should you have any queries on the above information, or wish to update us in regards to your proposed Target Start Date, please do so in response to this email.
Regards,
Connection and Developer Services

Uisce Éireann
Bosca OP 860, Oifig Sheachadta na Cathrach Theas, Cathair Chorcaí, Éire
Uisce Éireann

PO Box 860, South City Delivery Office, Cork City, Ireland

T: 1800 278 278
Text to Voice/Voic et otext:1800 378 378
www.water.ie

Is don duine amháin nó don eintiteas amháin ainmnithe ar an seoladh an fhaisnéis agus d'fhéadfadh ábhar faoi rún, faoi phribhléid nó ábhar atá íogair ó thaobh na tráchtála de a bheith mar chuid den fhaisnéis. Tá toirmeasc ar aon daoine nó aon eititis; nach dóibh siúd an fhaisnéis- aon athbhreithniú a dhéanamh, aon atarchur a dhéanamh nó aon athdháileadh a dhéanamh, nó aon úsáid eile a bhaint as an bhfaisnéis, nó aon ghníomh a bhraithfeadh ar an bhfaisnéis seo a dhéanamh agus d'fhéadfaí an dlí a shárú dá ndéanfaí sin. Séanann Uisce Éireann dliteanas as aon ghníomh agus as aon iarmhairt bunaithe ar úsáid neamhúdaraithe na faisnéise seo. Séanann Uisce Éireann dliteanas maidir le seachadadh iomlán agus ceart na faisnéise sa chumarsáid seo agus séanann Uisce Éireann dliteanas maidir le haon mhoill a bhaineann leis an bhfaisnéis a fháil. Má tá an ríomh-phost seo faighte agat trí dhearmad, déan teagmháil leis an seoltóir más é do thoil é agus scrios an t-ábhar ó gach aon ríomhaire. D'fhéadfadh ríomhphost a bheith so-ghabhálach i leith truaillithe, idircheaptha agus i leith leasuithe neamhúdaraithe. Séanann Uisce Éireann aon fhreagracht as athruithe nó as idircheapadh a rinneadh ar an ríomhphost seo nó as aon dochar do chórais na bhfaighteoirí déanta ag an teachtaireacht seo nó ag a ceangaltáin tar éis a sheolta. Tabhair faoi deara go bhféadfadh monatóireacht a bheith á dhéanamh ar theachtaireachtaí chuig Uisce Éireann agus ó Uisce Éireann d'fhonn ár ngnó a chosaint agus chun a chinntiú go bhfuiltear ag teacht le beartais agus le caighdeáin Uisce Éireann. Is cuideachta gníomhaíochta ainmnithe é Uisce Éireann atá faoi theorainn scaireanna, a bunaíodh de bhun fhorálacha na n-Achtanna um Sheirbhísí Uisce 2007-2022, a bhfuil a bpríomh-ionad gnó ag Teach Colvill, 24-26 Sráid na Talbóide, BÁC 1.

Go raibh maith agat as d'aird a thabhairt.

The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential, commercially sensitive and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited and may be unlawful. Uisce Éireann accepts no liability for actions or effects based on the prohibited usage of this information. Uisce Éireann is neither liable for the proper and complete transmission of the information contained in this communication nor for any delay in its receipt. If you received this in error, please contact the sender and delete the material from any computer. E-Mail may be susceptible to data corruption, interception and unauthorised amendment. Uisce Éireann accepts no responsibility for changes to or interception of this e-mail after it was sent or for any damage to the recipients systems or data caused by this message or its attachments. Please also note that messages to or from Uisce Éireann may be monitored to ensure compliance with Uisce Eireann's policies and standards and to protect our business. Uisce Éireann is a designated activity company limited by shares, established pursuant to the Water Services Acts 2007-2022, having its principal place of business at Colvill House, 24-26 Talbot Street, Dublin 1.

Thank you for your attention.

Next Steps[1] to proceed with this Connection Offer:

- Sign and return the Letter of Acceptance (see attached)
- Pay the Connection Charge (see Section 3(a) below)

You have **90 days** from the date of this Connection Offer to accept the offer.

Please note that Quotable Charges for the cost of completing any additional, non-standard, works required to facilitate connections are based on rates which are due to be revised shortly.

If you do not accept a Connection Offer within the acceptance period specified, any Quotable Charges within your Connection Offer may be subject to updated rates which could result in an increased Connection Charge.

If you wish to proceed with this Connection Offer, please complete the Next Steps listed above.

Yours sincerely

Yvonne Harris

Yvonne Harris
Head of Customer Operations

[1] The purpose of this list is to draw particular attention to the key deliverables in the Connection Agreement. Developers are required to adhere to all requirements specified in the Connection Agreement.

Outcome of your Connection Application - Details

Providing a connection between the:

Wastewater Works
(the "**Network(s)**")

AND

The development located at Ballynagran Landfill Ltd, Coolbeg Cross,, Wicklow
(the "**Customer's Premises**")

Following receipt of your application for a connection to the Network(s) (the "**Customer Application**"), Irish Water is pleased to offer you ("**You**" or the "**Customer**"), a connection between the Network(s) and the Customer's Premises, subject to and in accordance with the conditions set out in this Connection Offer (the "**Connection Offer**"), the General Conditions for a Water and/or Wastewater Connection (the "**General Conditions**", copy attached in Appendix 2) and any Special Conditions pertaining to this connection (the "**Special Conditions**", as may be attached in Appendix 3).

This Connection Offer is conditional upon payment of the Connection Charge and the return of the signed Letter of Acceptance (the form of which is included at Appendix 1 to this Connection Offer).

(Please note that capitalised terms not otherwise defined within this Connection Offer shall have the meaning given to them in the General Conditions)

1. Connection Agreement

We enclose a Letter of Acceptance for your consideration.

We would encourage You to read the entirety of this Connection Offer and the Connection Agreement. If You are satisfied with these and wish to proceed, please:

- sign the Letter of Acceptance and return it to **Irish Water, PO Box 860, South City Delivery Office, Cork City**. Alternatively, You can send back a scanned version of the signed Letter of Acceptance to newconnections@water.ie; and

- pay the Connection Charge in accordance with section 3 below.

You and Irish Water acknowledge that there shall be no intention to create any legally binding contract between You and Irish Water unless and until You have completed the above steps.
If, in the opinion of Irish Water, You have not returned the Letter of Acceptance or paid the Connection Charge, no contract shall come into force.

Once the signed Letter of Acceptance has been returned **and** the Connection Charge has been paid, the Connection Agreement shall become legally binding on You and Irish Water and the Connection Works can be carried out. The Connection Agreement is comprised of this Connection Offer, the General Conditions and any Special Conditions. In the event of any conflict or inconsistency between these documents, they shall apply in the following order:

i. Special Conditions
ii. General Conditions
iii. Connection Offer.

Any decision by Irish Water to enter into a Connection Agreement with You is made in reliance on the information in and with Your Customer Application. If the information supplied is incorrect or incomplete, Irish Water reserves the right to apply additional Connection Charges and contract terms.

Irish Water's decision to make a Connection Offer to You is made in reliance on the information contained in and submitted with the Connection Application. If the information supplied is incorrect or found to be materially inaccurate in any way, Irish Water reserves the right to apply additional Connection Charges, to impose additional contract terms and/or take any steps in accordance with the General Conditions.

This Connection Offer is based on a high-level desk top analysis carried out by Irish Water on the feasibility of a connection for your Development. Once the Connection Offer has been accepted by You, Irish Water will begin a detailed design of the connection. If during the process of detailed design Irish Water, at its discretion, forms the opinion (acting reasonably) that either:

A. a connection to your Development is not feasible or practicable or safe to complete; or
B. a connection to your Development would involve the expenditure by Irish Water of monies in excess of that provided for by way of the Connection Charge,

then the Connection Agreement may be terminated by Irish Water in accordance with General Condition 18.

The Connection Agreement shall constitute the entire agreement between You and Irish Water.

Any reference in this Connection Offer to an Appendix is to an appendix to this Connection Offer.

2. Validity of Connection Offer

You have 90 days from the date of this Connection Offer to accept the Connection Offer by returning the Letter of Acceptance **and** paying the Connection Charge. Thereafter, the Connection Offer shall lapse unless otherwise agreed in writing by Irish Water.

3. Connection Charge

The Connection Charge(s) shall be determined in accordance with Irish Water's Connection Charging Policy as set out in the Water Charges Plan (which can be found at www.water.ie/connections)

The Wastewater Connection charge is €23,344.00

The Total Connection Charge is €23,344.00 ("**Connection Charge**"). A breakdown of the Connection Charge is set out in Appendix 4.

Payment of the Connection Charge can be made by:
A. Cheque, made payable to "Irish Water" or
B . Money Transfer, by EFT to the following bank account:

Allied Irish Bank, 40/41 Westmoreland Street, Dublin 2, Ireland.

Account Name	BIC	IBAN
IW AR-EFT	AIBKIE2D	IE29 AIBK 9333 8464 3085 94

Please note that You must quote the Irish Water reference number specified above in any communications and when making payment (see 'Our Reference' on the first page of this letter). The Connection Charge will only be deemed paid when funds have cleared in Irish Water's bank account.

4. Connection Works

Once the Connection Offer has been validly accepted, Irish Water or its agent shall make contact with You to schedule the Connection.

5. Distribution System, Drains and Service Connection

You are responsible for providing, maintaining and renewing the Distribution System and/or Drains and Service Connection required for the provision of Water Services (see General Condition 10).

6. Cancellation by the Customer

You may cancel the proposed Connection by writing to Irish Water at the contact address set out below within fourteen (14) Business Days of returning the Letter of Acceptance:

- noting that you wish to cancel the Connection; and
- quoting the reference number set out above (see 'Our Reference' on the first page of this letter);

No charges will be incurred by You unless the Connection or part thereof has already been carried out with your agreement. If You cancel the Connection in accordance with this paragraph, Irish Water will refund any payment which You have already made for the proposed Connection, subject to any costs that may have already been incurred by Irish water in the provision of the Connection.

7. Queries

If You have any queries in relation to the payment of the Connection Charge or otherwise, please contact Irish Water's Customer Service Department at:

Telephone: 1800 278 278 or +353 1 707 2828
Email: newconnections@water.ie
Web: www.water.ie/contact-us

8. Disputes

Any dispute in respect of the terms of this Connection Offer (including in relation to the Estimate of Connection Costs) may, upon your application, be referred to the Irish Water

complaints process. Details of the Irish Water Complaints Process are available on the Irish Water website.

Once a legally binding Connection Agreement is entered into, all disputes in relation to your agreement with Irish Water shall be resolved pursuant to General Condition 30.

9. Next Steps

- **Accepting the Offer**: sign and return the Letter of Acceptance and pay the Connection Charge.
- **Customer Construction Phase**: If required, Irish Water or its agent will contact You in relation to the connection assets required to facilitate your connection to the Network(s).
- **Connection to Network(s)**: Irish Water or its agent will contact You to arrange a suitable time to complete the Connection Works.

Appendix 1

Letter of Acceptance

Letterof Acceptance

[to be returned to Irish Water]

Irish Water

PO Box 860

South C'ityDelivery Office

CorkCity

I /we have read, un derstood acc ept and agree to comply in full with the terms of the Connection Offer dated 30 August 2023, the General Conditions and any Special Conditions (which together constitute the Connection Agreement)..

I/we further understand and acknowledge that there shall be no intention to create any legally binding cont ract between me/us and Irish Water unless and until I/we have completed, signed a nd returned this Letter of Acceptance and paid the Connection Charge.

I/we have made payment for Connection Reference CDS2200803901 via

Electronic Funds Transfer EFT ☒

Cheque ☐

Customer address: Ballynagon Landfill Ltd, Coolboy Cross, Co. Wexford, Y67 KF53

Customer's signature: D Holmes

For and on beh alfof: Ballynagon Landfill Ltd

Print full name of Customer in BLOCK le tters. Damien Holmes

Date: 21/12/23

Connect ion Reference: CDS2200803901

Appendix 1

Letter of Acceptance

Letter of Acceptance

[to be returned to Irish Water]

Irish Water

PO Box 860

South City Delivery Office

Cork City

I/we have read, understood, accept and agree to comply in full with the terms of the Connection Offer dated 30 August 2023, the General Conditions and any Special Conditions (which together constitute the Connection Agreement).

I/we further understand and acknowledge that there shall be no intention to create any legally binding contract between me/us and Irish Water unless and until I/we have completed, signed and returned this Letter of Acceptance and paid the Connection Charge.

I/we have made payment for Connection Reference CDS2200803901 via

Electronic Funds Transfer EFT ☐
Cheque ☐

Customer address: _____

Customer's signature: _____

For and on behalf of: _____

Print full name of Customer in BLOCK letters: _____

Date: _____

Connection Reference: CDS2200803901

Letter of Acceptance

[Customer Copy]

[to be retained by Customer]

I/we have read, understood, accept and agree to comply in full with the terms of the Connection Offer dated 30 August 2023, the General Conditions and any Special Conditions (which together constitute the Connection Agreement).

I/we further understand and acknowledge that there shall be no intention to create any legally binding contract between me/us and Irish Water unless and until I/we have completed, signed and returned this Letter of Acceptance and paid the Connection Charge.

I/we have made payment for Connection Reference CDS2200803901 via

Electronic Funds Transfer EFT ☐
Cheque ☐

Customer address: _____

Customer's signature: _____

For and on behalf of: _____

Print full name of Customer in BLOCK letters: _____

Date: _____

Connection Reference: CDS2200803901

APPENDIX 2

General Conditions

IRISH WATER

General Conditions for a Water and/or Wastewater Connection

(Version 0.2)

February 2019

General Conditions for a Water and/or Wastewater Connection
(the "General Conditions")

1. **Definitions:** In these General Conditions the following definitions apply:

"Affiliate" of a Person means any subsidiary or holding company (within the meaning given to such expressions by the Companies Act 2014) of such Person or any subsidiary of any such holding company;

"Applicable Law" means all Acts of the Oireachtas, statutory instruments, regulations, orders and other legislative provisions which in any way relate to the Connection Agreement, including the Water Services Acts, the Building Regulations, the Construction Regulations and any code or guidance as may be issued from time to time by any Regulator or relevant industry authority. Any reference to "Applicable Law" or any enactment or statutory provision is a reference to it as it may have been, or may from time to time be amended, modified, consolidated or re- enacted;

"Building Regulations" mean the Building Control Acts 1990 to 2014 and all subordinate legislation and regulations made pursuant to the said Acts including, without limitation the Building Control Regulations 1997 to 2017 and relevant codes of practice, and any amendment, update or replacement or repeal thereof;

"Business Day" means every day other than a Saturday or Sunday or bank or public holiday in Ireland;

"Competent Authority" means any local or national or supra-national agency, authority, department, inspectorate, ministry, official or public or statutory Person (whether autonomous or not) or regulatory authority of Ireland or of the European Union which has jurisdiction over any of the Parties to the Connection Agreement and the subject matter of the Connection Agreement, including the Commission for Regulation of Utilities but excluding a court or tribunal of competent jurisdiction;

"Connection Charging Policy" means the Irish Water Connection Charging Policy which may be found at www.water.ie/connections;

"Connection Offer" means the conditional offer letter issued by Irish Water to the Customer relating to the connection of the Customer's Premises to the Network(s) and which forms part of the Connection Agreement;

"Connection Agreement" means the agreement between the Customer and Irish Water to facilitate the connection of the Customer's Premises to the Network(s), which shall be comprised of the Connection Offer (including the appendices thereto), the General Conditions and the Special Conditions (if any);

"Connection Charge" means the charge for connecting to the Irish Water Waterworks and/or Wastewater Works (as the case may be), as specified in the Connection Offer. The Connectio n Charge shall only be deemed paid when funds have cleared in Irish Water's bank account;

"Connection Facilities" means the facilities (including the Service Connection(s)) required to be constructed and/or upgraded and installed by Irish Water in order to connect the Customer's Pipe Work to the Network(s);

"Connection Point(s)" means a location or locations to be determined by Irish Water (which may be outside the boundary to the curtilage of the Customer's Premises) at which the Customer's Pipe Work is to be connected to the Waterworks (where, as specified in the Connection Offer, the Customer requires connection to the Waterworks) or the Wastewater Works (where, as specified in the Connection Offer, the Customer requires connection to the Wastewater Works) (via the Service Connection(s)). Connection Points may differ for both the Waterworks and Wastewater Works;

"Connection Works" means the permanent and temporary works and services to be performed by or on behalf of Irish Water in the acquisition, design, procurement, construction and installation of the Connection Facilities and the obtaining of permits and the tie-in and commissioning of a Connection Point(s) in accordance with the requirements of this Connection Agreement;

"Construction Regulations" means the Safety Health and Welfare at Work Act 2005, the Safety Health and Welfare at Work (General Application) Regulations 2007 to 2016 as amended, the Safety Health and Welfare at Work (Construction) Regulations 2013 as amended and any guidance requirements issued from time to time from the Health and Safety Authority;

"Customer" means the person or entity to whom the Connection Offer is addressed and who has entered into the Connection Agreement with Irish Water;

"Customer's Pipe Work" means the pipe, relating fittings and associated accessories to be laid by the Customer within the boundary of the Customer's Premises in accordance with Relevant Standards and Applicable Laws, , and the Distribution System (if connecting to the Waterworks) and the Drain (if connecting to the Wastewater Works), to be used to connect the Customer's Premises at a Connection Point;

"Customer's Premises" means the premises identified as such in the Connection Offer, including any part of any public or private building, vessel, vehicle, structure or land (whether or not there are structures on the land and whether or not the land is covered with water), and any plant or related accessories on or under such land, or any hereditament of tenure, together with any out-buildings and curtilage and which is:

- receiving Water Services; or

- specified in an application for Water Services completed by the Customer; or

- a premises deemed to be a premises by Irish Water; or

- such other premises as may be notified by the Customer to Irish Water and

accepted in writing by Irish Water from time to time, but does not include land which is a Public Road, a road which is the subject of an order under Section 11 of the Roads Act 1993 or a road which has been taken in charge by a local authority pursuant to a non-statutory local authority taking in charge scheme;

"Deed(s) of Grant of Wayleaves and Easements" means the Deed(s) of Grant of Wayleaves and Easements referred to in Clause 10 hereof;

"Dispute" means a difference or dispute between the Parties arising out of or in connection with this Connection Agreement;

"Distribution System" means a pipe and its related fittings, that is used or to be used as the case may be to convey water into or through one or more Customer's Premises (including any related internal or external taps) excluding a Service Connection;

"Drain" means a drainage pipe, or system of such pipes and related fittings for collection of Wastewater, that is not owned by, vested in or controlled by Irish Water, and that is not a Service Connection, which is used or to be used as the case may be, to convey Wastewater from one or more Customer's Premises or to any wastewater treatment system on a Customer's Premises where the Wastewater is generated;

"Environment" means the environment generally, including all physical, biological and ecological aspects of the environment and:

(a) air, including that within buildings or natural or man-made structures above or below ground;

(b) water, including the open sea, coastal or inland waters, ground waters, aquifers, drains and sewers;

(c) land, including the seabed or riverbed under any water as described above, and any surface land and sub-surface land; and

(d) human and animal health, and plant life;

"Environmental Law" means any statute or common law, or other requirement having the effect of law, in Ireland relating to the Environment, including without limitation the provisions of the Water Services Acts and Local Government (Water Pollution) Acts 1977 to 2007;

"Environmental Protection Agency" means the Environmental Protection Agency established pursuant to the Environmental Protection Agency Act, 1992;

"Force Majeure" means any event not within the reasonable control of a Party and which could not have been prevented or the consequences of which could not have been prevented by a Party acting and having acted as a Reasonable and Prudent Operator and which has the effect of preventing a Party from complying with its obligations under this Connection Agreement, including:

- acts of terrorists;

- war declared or undeclared, blockade, protest, revolution, riot, insurrection, civil commotion, invasion or armed conflict;

- sabotage or acts of vandalism, criminal damage or the threat of such acts;

- extreme weather or environmental conditions including drought, extreme storms, lightning, fire, landslip, accumulation of snow or ice, natural disasters and phenomena including meteorites, the occurrence of pressure waves caused by aircraft or other aerial devices travelling at supersonic speeds, impact by aircraft, volcanic eruption, explosion including nuclear explosion, radioactive or chemical contamination or ionising radiation;

- any change of legislation, governmental order, restraint or directive having the effect of preventing or delaying the performance of any obligation hereunder;

- a strike or any other form of industrial actions by persons employed by the affected Party or by any local authority or by any contractor, subcontractor or agent of the affected Party;

- any strike which is part of a labour dispute of a national character occurring in Ireland or elsewhere;

- the act or omission of any contractor, subcontractor or supplier of either Party but only if due to an event which, but for the contractor, subcontractor or supplier not being a Party to the Connection Agreement, would have been Force Majeure;

- an outbreak of foot and mouth or any other restrictions put in place as part of a strategy to contain a communicable disease in Ireland; and

- the collapse of the euro currency;

provided that the following shall not constitute Force Majeure:

- lack of funds and/or the inability of a Party to pay; and

- mechanical or electrical breakdown or failure of machinery or plant owned or operated by either Party other than as a result of the circumstances identified above;

"Irish Water" means Irish Water (Uisce Éireann) a designated activity company incorporated in Ireland (company registration number 530363) and having its registered office at 24-26 Talbot Street, Dublin 1;

"Legal Requirement" means any Applicable Law, legislation or directive, regulation,

requirement, instruction, direction or rule of any Competent Authority binding on either or all of the Parties to this Connection Agreement and includes any modification, extension or replacement thereof then in force;

"**Network**(s)" means the Waterworks and/or the Wastewater Works, as applicable and specified on the face of the Connection Offer, and any related lands, which are owned by, vested in, controlled or used by Irish Water;

"**PRA Compliant Map**" means ordinance survey plans, suitable for registration of any Deed of Grant of Wayleaves and Easements relating to property intended to be taken in charge by the local authority and the Connection Facilities to be vested in Irish Water together with all easements relating thereto suitably identified by the relevant symbols and/or colours designated by the Property Registration Authority.

"**Public Road**" means a road over which a public right of way exists and the responsibility for the maintenance of which lies on a road authority;

"**Reasonable and Prudent Operator**" means a person acting in good faith with the intention of performing its contractual obligations hereunder and in so doing and who in the general conduct of its undertaking exercises that degree of skill and diligence which would reasonably and ordinarily be exercised by a skilled and experienced operator complying with Applicable Law engaged in the same type of undertaking under the same or similar circumstances and conditions and the expression "**Standard of a Reasonable and Prudent Operator**" shall be construed accordingly;

"**Regulator**" means, where applicable, all present and future regulatory bodies having jurisdiction over Irish Water including, but not limited to, the Commission for Regulation of Utilities, the Environmental Protection Agency, the Minister of Housing, Planning and Local Government, the Office of the Data Protection Commissioner, the Competition and Consumer Protection Commission and/or any other statutory body or regulatory authority which regulates on an on-going basis or from time to time the business or operations of Irish Water;

"**Relevant Standards**" means the Connections and Developer Services Standard Details and Codes of Practice published and amended from time to time by Irish Water which are applicable to the Customer's Pipe Work and which are available on the Irish Water website (www.water.ie/Connections);

"**Service Connection**" means a water supply pipe or drainage pipe, together with any accessories and related fittings, extending from a Waterworks (where, as specified in the Connection Offer, the Customer requires connection to the Waterworks) or Wastewater Works (where, as specified in the Connection Offer, the Customer requires connection to the Wastewater Works) to the outer edge of the boundary to the curtilage of the Customer's Premises and used, or to be used as the case may be, for the purpose of connecting the Customer Premises with a Waterworks and/or Wastewater Works (as the case may be), and, if used or to be used for connecting more than one such premises it shall extend to the outer edge of the boundary to the curtilage of the premises which is furthermost from the said Waterworks and/or Wastewater Works (as the case may be);

"Sewage" and **"Sewage Effluent"** have the meanings assigned to them by the Local Government (Water Pollution) Acts 1977 to 2007;

"Sewers" means sewers of every description, excluding Storm Water Sewers, owned by, vested in or controlled by Irish Water, but does not include a Drain or Service Connection;

"Special Conditions" means any special conditions attached to the Connection Offer or as may be agreed from time to time;

"Storm Water" means run-off rainwater that enters any pipe;

"Storm Water Sewer" means any pipe or other conduit (a) used solely for the conveyance of Storm Water; or (b) designed or intended to be used for the conveyance of Storm Water (whether or not it is connected to a sewer by a 'storm water overflow' within the meaning of the Waste Water Discharge (Authorisation) Regulations 2007;

"Wastewater" means Sewage or other Sewage Effluent discharged, or to be discharged, to a Drain, Service Connection or Sewer but does not include Storm Water;

"Wastewater Works" means Sewers and their accessories, and all other associated physical elements used for collection, storage, measurement or treatment of Wastewater, and any related lands, which are owned by, vested in, controlled or used by Irish Water;

"Water Main" means water supply pipes owned by, vested in or controlled by Irish Water but does not include pipes, fittings and appliances to which the terms "Service Connection" or "Distribution System" apply;

"Water Services" means all services, including the provision of water intended for human consumption, which provide storage, measurement, treatment or distribution of surface water, ground water, and/or Wastewater collection, storage, measurement, treatment or disposal;

"Water Services Acts" means the Water Services Acts 2007 to 2017;

"Waterworks" means water sources, Water Mains and their accessories, and all other associated physical elements used for the abstraction, treatment, storage, measurement or distribution of water, and any related land, which are owned by, vested in, controlled or used by Irish Water;

"Water Supply Maintenance Point" means the point at which a Service Connection for water supply enters the boundary to the curtilage of the Customer's Premises.

2. **Interpretation**: Unless the context otherwise requires, any reference in this Connection Agreement to:

2.1 any gender includes the other;

2.2 a statute, bye laws, regulation, delegated legislation or order is to the same as amended, modified or replaced from time to time and to any bye law, regulation, delegated legislation or order made thereunder;

2.3 any agreement, instrument or code is to the same as amended, novated, modified, supplemented or replaced from time to time;

2.4 unless otherwise specified any reference in this Connection Agreement to a "Clause" or "Appendix" is a reference to a Clause or Appendix in this Connection Agreement;

2.5 "**including**" means comprising but not by way of limitation to any event, class, list or category;

2.6 a "**Person**" shall be construed as a reference to any natural or legal person, firm, company, corporation, Government or Agency of a State or any association or partnership (whether or not having separate legal personality). A Person includes that person's legal or personal representative, permitted assigns and successors;

2.7 "**Party**" means a party to this Connection Agreement and "**Parties**" shall be construed accordingly;

2.8 the singular shall include the plural and vice versa;

2.9 words not otherwise defined that have well-known and generally acceptable technical or trade meanings in the water industry are used in this Connection Agreement in accordance with such recognised meanings;

2.10 where a word or expression is defined in this Connection Agreement, related words and expressions shall be construed accordingly;

2.11 headings are for ease of reference only and shall not affect its construction;

2.12 time shall be construed by reference to whatever time is applicable in Ireland; and

2.13 whe rea Party is required to use "**all reasonable endeavours**" that Party should explore all avenues reasonably open to it, and explore them all to the extent reasonable, but the Party is neither obliged to disregard its own commercial interests, nor required to continue trying to comply if it is clear that all further efforts would be futile; and

2.14 references to the "Commission for Regulation of Utilities" shall include any Competent Authority which may replace or succeed the Commission and assume its functions in relation to the regulation of the water industry in Ireland.

3. **Defined Terms in Connection Offer:** Terms which appear in uppercase in these General Conditions which are not otherwise defined shall have the meaning given to them in the Connection Offer.

4. **Order of Precedence:** In the event of inconsistency or conflict between the Connection Offer, the General Conditions and the Special Conditions, the following order of precedence will apply: (1) Special Conditions (2) General Conditions (3) Connection Offer.

5. **Regulated Entity:** Irish Water operates within a regulatory framework governed by the Regulators.

6. **New Connection:** Irish Water shall charge and the Customer has agreed to pay in full the Connection Charge notified to the Customer in the Connection Offer. Following payment by the Customer, Irish Water shall perform or procure a third party to perform its obligations under the Connection Agreement and the Customer shall perform its obligations under the Connection Agreement.

7. **Sub-contractors/Agents:** The Customer acknowledges that Irish Water may sub-contract or engage an agent to perform certain of the obligations of Irish Water pursuant to the Connection Agreement, in which case, Irish Water shall not be relieved of any obligation or liability with respect to its rights or obligations under the Connection Agreement. The Customer shall have no recourse to any such third party; the Customer's sole recourse shall be to Irish Water in accordance with the Connection Agreement.

8. **Rights and obligations under law.** Nothing in this Connection Agreement shall affect or prejudice any rights, duties or obligations of the Parties under Applicable Laws.

9. **Principal Obligations:**

9.1 Subject to the terms of this Connection Agreement, Irish Water will carry out (or procure the carrying out) of Connection Works to facilitate the connection of the Customer's Premises to the Waterworks and/or Wastewater Works as specified in the Connection Offer).

9.2 The Customer will:

9.2.1 carry out its obligations pursuant to Clause 10 to facilitate the connection of the Customer's Premises to the Waterworks and/or Wastewater Works (as the case may be and as specified in the Connection Offer);

9.2.2 comply with all Relevant Standards and Applicable Laws and obtain all necessary easements, licences, permits or authorisations that may be required in connection with the performance of its obligations and its receipt of the Water Services pursuant to this Connection Agreement.

10. **Customer's Connection Obligations:**

10.1 The Customer shall:

10.1.1 make payment to Irish Water of the Connection Charge set out in the Connection Offer;

10.1.2 in a timely manner, provide, install, test and commission within the boundary to the curtilage of the Customer's Premises all Customer Pipework necessary to connect the Customer's Premises, Distribution System (if connection is to Waterworks) and Drain(s) (if connection is to Wastewater

Works) to the Network(s) at the Connection Point(s) in accordance with Relevant Standards and Applicable Law;

10.1.3 provide safe, free and unrestricted access (which access may not be exclusive) for Irish Water and, and all parties acting on its behalf, to any land or premises of the Customer when reasonably required for the purposes of Irish Water's functions or in relation to this Connection Agreement;

10.1.4 if required by Irish Water in the Connection Offer and at the Customer's own cost, procure adequate way-leaves and easements from third party landowners for the Customer Pipe Work and the Connection Facilities (so that Irish Water and all parties acting on its behalf can establish and carry out the Connection Works) and if required by Irish Water:

10.1.4.1 deliver for approval by Irish Water the PRA Compliant Map;

10.1.4.2 where the Connection Facilities are not entirely comprised within the boundaries of the lands owned by the Customer, the Customer shall deliver to Irish Water a Deed of Grant of Wayleaves and Easements (in duplicate) for the benefit of Irish Water and the Connection Facilities, duly executed by the applicable landowner (to include without limitation a protected strip of ten metres, five metres on either side of the Connection Facilities, in respect of the full length of the Connection Facilities, unless an alternative strip width has been agreed in writing with Irish Water) TOGETHER WITH the PRA Compliant Map. The required form of Deed of Grant of Wayleaves and Easements will be provided by Irish Water on request;

10.1.4.3 irrevocably instruct its appointed solicitor to use best endeavours to stamp and register the Deed(s) of Wayleaves and Easements in the Property Registration Authority as soon as practicable at the Customer's expense and to provide notice of the relevant dealing number and evidence of such registration to Irish Water immediately following completion of registration **PROVIDED THAT** if requested by Irish Water the Customer shall consent to Irish Water taking over the registration process, and the Customer undertakes and agrees to assist Irish Water with this registration process following written request to do so;

10.1.4.4 specifically include reference and notice of the Deed(s) of Wayleaves and Easements in favour of Irish Water in any transfers, conveyances, assignment, lease and/or licence which it may have with any third party .

10.1.5 inform Irish Water, and all parties acting on its behalf, of any relevant safety precautions before entry to the Customer's Premises. Since Irish Water will not be aware of the specific hazards present on the Customer's Premises, the Customer is obliged to inform Irish Water of such hazards. The Customer must ensure that Irish Water, and all parties acting on its behalf, are either accompanied at all times by the Customer, or has been

adequately briefed as to the presence of any specific hazards, the precautions that must be taken and what to do in the event of an accident or emergency;

10.1.6 co-operate with and assist Irish Water, and all parties acting on its behalf;

10.1.7 not unreasonably interfere with or restrict the carrying out of Irish Water's obligations in accordance with this Connection Agreement;

10.1.8 not do or cause or permit to be done anything which causes, or could reasonably be expected to cause, damage or destruction to any part of the Connection Works or in any way interferes with its operation or materially interferes with Irish Water's (and all parties' acting on its behalf) access to same;

10.1.9 be solely responsible at all times for maintaining and keeping excavations and reinstatements on its property in a safe and secure condition and will indemnify and keep indemnified Irish Water, its servants, agents and contractors against all claims, demands, proceedings, damages and expenses whatsoever in respect thereof;

10.1.10 where there is to be a connection to the Waterworks, accept liability for the care, maintenance, renewal and repair of the Customer Pipework and the plumbing fixtures and fittings and associated pipework of the Distribution System up to the Connection Point where the Service Connection connects with the Distribution System, to ensure that such infrastructure complies at all times with Applicable Law including but not limited to European Union (Drinking Water) Regulations 2014 and any regulations that may be made under Section 54 of the Water Services Act 2007 or any bye-laws made by Irish Water. Irish Water shall accept no responsibility for the maintenance, renewal, adequacy, safety or other characteristics of such infrastructure, save that, in terms of water supply, Irish Water shall maintain and repair that part of the Service Connection extending from the Waterworks up to the Water Supply Maintenance Point;

10.1.11 where there is to be a connection to the Wastewater Works, accept liability for the care, maintenance, renewal and repair of the Customer Pipe Work and the plumbing fixtures and fittings and associated pipework of any Drains up to the Connection Point with the Service Connection to which those Drains are connected. Irish Water shall accept no responsibility for the maintenance, renewal, adequacy, safety or other characteristics of such infrastructure. Any Drain or Drains located within the boundary to the curtilage of the Customer's Premises and/or any system of Drains that drains more than one premises within the boundary to the curtilage of those Customer's Premises shall be the sole responsibility of the Customer; and

10.1.12 agree the timing of any works to be carried out by the Customer with Irish Water.

10.2 The Customer shall take such steps as Irish Water may notify from time to time to prevent a risk to human health or the environment, to facilitate the reasonable conservation of water, to ensure the proper and effective management of Water Services, to prevent contamination of any Waterworks (where there is to be a connection to the Waterworks), and to protect the Wastewater Works (where there is to be a connection to the Wastewater Works).

10.3 The Customer shall not allow discharge of rainwater runoff from roofs, paved areas or other surfaces into any Drain or Sewer, except as may be agreed in advance in writing with Irish Water.

10.4 During the duration of this Connection Agreement, Irish Water may specify any technical requirements or standards necessary to minimise the risk of leakage or to protect the integrity of any Waterworks or Wastewater Works.

10.5 For the avoidance of doubt, the Customer is prohibited from using the Service Connection and/or using any other mechanism to supply Water Services onwards to another location or premises other than the Customer's Premises notified to Irish Water by the Customer to which the Service Connection applies. Irish Water shall in no way be liable for a breach of this provision by the Customer or by any other third party, including any adverse consequences arising directly or indirectly as a result of such a breach and all costs, damages or claims arising therefrom.

10.6 The Customer hereby indemnifies Irish Water and its servants, agents and contractors in respect of any loss, damage or injury that may result from the laying or use of pipes within the boundary to the curtilage of the Customer's Premises. The Customer indemnifies Irish Water and its servants, agents and contractors in respect of any loss, damage or injury caused as a result of any leakage of Wastewater from Drains or Service Connections or water from the Distribution System up to the Connection Point where Service Connection connects with the Distribution System.

10.7 The Customer shall be solely responsible for preventing any backflow, back syphonage or blowback from the Distribution System of the Customer's Premises into the Water Main or Waterworks.

10.8 Where a connection is made to the Wastewater Works, Irish Water shall be entitled to take spot samples of the Wastewater discharged by the Customer for the purposes of testing compliance with the terms of this Connection Agreement and/or for general research or compliance purposes. If, in the opinion of Irish Water, the characteristics of the Customer's Wastewater are such that it is likely to produce what Irish Water determines to be a significant impact upon the Wastewater Works, then Irish Water may require the Customer to enter into a separate end-user agreement containing additional conditions in connection with the treatment of the Customer's Wastewater. The Customer acknowledges and agrees that it will, if requested to do so by Irish Water, cease discharging its Wastewater to the Network pending entry into the end-user agreement

11. Use of Water:

11.1 Where in the opinion of Irish Water, waste or deliberate misuse of water occurs on the Customer's Premises, Irish Water may restrict or reduce the pressure of the Water Services temporarily until satisfied that the waste or misuse has been rectified.

11.2 The Customer may in times of water scarcity be required to limit the use of Water for essential purposes only as prescribed by Irish Water.

11.3 With the exception of customers covered under the Irish Water Domestic Customer Vulnerable Code of Practice, the Customer shall be responsible for installing and maintaining sufficient storage to provide a reserve water supply if that is necessary for any special needs which the Customer has for a specific rate of flow or pressure or if, taking account of any interruption to the Water Services which might occur due to works, a burst or any other reason, a prudent customer acting reasonably in order to protect its business needs would provide such storage.

11.4 The Customer shall ensure so far as practicable that all water is drawn at a reasonably regular rate of flow and pressure and shall use its storage facility to reduce peak demands being made upon the Waterworks by the Customer.

11.5 The provisions of this Clause 11 shall survive the termination or expiry of this Connection Agreement.

12. Time for Completion/Delays: Irish Water shall use commercially reasonable endeavours to ensure that the Connection Works are completed in a timely manner but Irish Water shall not be liable for any loss or damage suffered by the Customer in respect of delays resulting from any cause whatsoever.

13. Third Party Losses: The Customer shall indemnify Irish Water and its servants, agents and contractors, and hold Irish Water and its servants, agents and contractors harmless at all times from any and all losses of any third party incurred, suffered or sustained pursuant to this Connection Agreement, but only to the extent any such loss was not caused by Irish Water's breach of this Connection Agreement or the negligence of Irish Water in undertaking its obligations under this Connection Agreement.

14. Liability:

14.1 **Immunity:** Nothing in this Connection Agreement shall affect any immunity that Irish Water benefits from Applicable Law.

14.2 **Death or Personal Injury:** Subject to Clause 14.1 above, nothing in this Connection Agreement will exclude or limit the liability of either Party for death or personal injury resulting from the negligence of that Party or any other loss that cannot be excluded or limited under Applicable Law.

14.3 **Reasonable and Prudent Operator**: Subject to Clause 14.2, where the obligations of

Irish Water are performed in accordance with the Standard of a Reasonable and Prudent Operator, Irish Water shall have no liability whatsoever to the Customer in respect of this Connection Agreement.

14.4 **No liability for Force Majeure:** Neither Party shall be liable for any breach of this Connection Agreement directly or indirectly caused by Force Majeure.

14.5 **No Liability:** Neither Party shall be liable to the other Party in contract, tort, warranty, strict liability or any other legal theory for: (a) any loss of profit, revenue, use, contract (other than this Connection Agreement), opportunity, or goodwill; or (b) punitive or exemplary damages; or (c) any indirect, consequential, incidental or special damages (including punitive damages).

14.6 **No implied warranties:** All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Connection Agreement.

15. **Assignment:** The Customer shall not be entitled to assign the benefit or transfer the burden of this Connection Agreement without the prior written consent of Irish Water. Nothing shall prevent Irish Water from assigning the benefit or transferring the burden of this Connection Agreement to an Affiliate.

16. **Sub-contractors:** Either Party shall have the right to sub-contract or delegate the performance of any of its obligations or duties arising under this Connection Agreement without the prior consent of the other Party. Such subcontracting by Irish Water or the Customer of the performance of any obligations or duties under this Connection Agreement shall not relieve Irish Water or the Customer (as the case may be) from liability for performance of such obligation or duty.

17. **Customer's Authority:** The Customer represents and warrants to Irish Water that it has full power and authority to enter into and to exercise its rights and perform its obligations under this Connection Agreement and has obtained all authorisations and consents necessary for it to so enter, exercise rights and perform obligations and such authorisations and consents are in full force and effect.

18. **Term & Termination:**

18.1 This Connection Agreement shall commence upon the date that the Customer returns the Customer Acceptance Form and pays the Connection Charge (and if these occur on different days, the Connection Agreement shall commence on the later date) and shall continue in full force and effect until the Parties' respective obligations under Clause 9 have been performed in full unless it is earlier terminated in accordance with the provisions of this Connection Agreement.

18.2 The Connection Offer and this Connection Agreement is based on a high-level desk top analysis carried out by Irish Water on the feasibility of a carrying out the Connection Works for the Customer Premises. Once the Connection Offer has been accepted by You, Irish Water will begin a detailed design of the Connection Works. If during the process of detailed design Irish Water, at its discretion, forms the opinion (acting

reasonably) that either:

A. the Connection Works are not feasible or practicable or safe to complete; or
B. the acquisition of all rights for the laying of the Customer Pipe Work and/or the Connection Works are not possible or commercially practicable; or
C. the Connection Works would involve the expenditure by Irish Water of monies in excess of that provided for by way of the Connection Charge,

then the Connection Agreement may be terminated by Irish Water by way of written notice to the Customer. In the event that Irish Water exercises its right to terminate the Connection Agreement on the basis of the foregoing then Irish Water shall return any Connection Charge paid by the Customer, less (if deemed appropriate by Irish Water) any outstanding costs and expenses incurred by Irish Water as at the date of termination. This provision is additional to and does not replace any other provisions relating to termination.

18.3 Irish Water shall be entitled to terminate this Connection Agreement by written notice to the Customer if the Customer sells the Customer Premises to a third party.

18.4 The Customer shall be entitled to terminate this Connection Agreement upon written notice to Irish Water within 14 days of the date of this Connection Agreement.

18.5 Either Party shall be entitled to terminate this Connection Agreement upon written notice to the other Party where:

18.5.1 there is in any material breach by the other Party of its obligations under this Connection Agreement and the breach cannot be remedied or if it is capable of being remedied, it has not been remedied by such Party within 28 days of the issue of a notice to it by the other Party identifying the breach and requiring it to be remedied; and

18.5.2 an event of Force Majeure persists for a period of 180 days or more, provided at least 14 days' notice of termination has been given in writing.

18.6 In the event that either Party exercises its right to terminate under this Clause before the Connection Works commence, Irish Water shall return any Connection Charge paid by the Customer, less any outstanding costs and expenses incurred by Irish Water as at the date of termination, including, but not limited to, costs of construction, and any legal or financing costs.

18.7 Termination of this Connection Agreement shall not prejudice or affect any right of action or remedy which shall have accrued or shall thereafter accrue to either Party under this Connection Agreement.

18.8 Without prejudice to Clause 18.7, in particular, the following clauses:

Clause 4 (Order of Precedence);
Clauses 10.1.1, 10.1.9, 10.1.10, 10.1.11, 10.2, 10.3, 10.5, 10.6, 10.7 and 10.8;
Clause 11 (Use of Water);
Clause 13 (Third Party Losses);
Clause 14 (Liability);

Clause 18 (Term and Termination);
Clause 20 (Insurance);
Clause 26 (Entire Agreement);
Clause 21 (Data Protection);
Clause 29 (Governing Law) and
Clause 30 (Disputes),

of this Connection Agreement shall continue in full force and effect and be fully binding on the Parties notwithstanding termination or expiry.

19. Notices:

19.1 Notices or other communications given pursuant to this Connection Agreement shall be in writing and shall be sufficiently given if delivered by hand or sent by e-mail or pre-paid registered post to the e-mail or postal address referred to below of the Party to which the notice or communication is being given or to such other address and as such Party shall communicate from time to time to the Party giving the notice or communication.

19.2 The Customer's address for service is as set out in the Connection Offer.

19.3 Any notice required or permitted to be given by the Customer shall be in writing addressed to Irish Water at Irish Water, PO Box 860, South City Delivery Office, Cork City or by email to newconnections@water.ie or such other address or electronic mail address as may be notified by the Customer to Irish Water from time to time.

19.4 Every notice given in accordance shall be deemed to have been received as follows:

Means of Dispatch	**Deemed Received**
Hand Delivery	The time of delivery.
Post	48 hours after posting (and proof that the envelope containing the notice or communication was properly addressed and sent by pre-paid registered post will be sufficient evidence that the notice or other communication has been duly served or given).
Email	Upon receipt by the addressee of the complete text in legible form.

provided that if, in accordance with the above provisions, any such notice or other communication would otherwise be deemed to be given or made outside working hours (being 9am to 5.30pm on a Business Day) such notice or other communication shall be deemed to be given or made at the start of working hours on the next Business Day.

20. Insurance:

20.1 The following insurance obligations will apply in the alternative depending on whether the Customer's Premises is a:

20.1.1 *single domestic unit* (see Clause 20.2 below); or
20.1.2 *a small non-domestic development* (where the connection to the Customer's Premises is proposed to be a 25mm water supply Service Connection and/or a 100mm Wastewater Service Connection)(see Clause 20.2 below); or
20.1.3 a development *other than* a single domestic unit or a small non-domestic unit (see Clause 20.3 below).

20.2 Where this Connection Agreement relates to a *single domestic unit* or *a small non-domestic development*, the Customer shall ensure that any Contractor engaged by them in relation to the Customer's Pipe Work has appropriate and adequate insurance cover in place throughout the duration of the works in relation to the matters referred to in Clause 10.

20.3 Where this Connection Agreement relates to developments *other than* a single domestic unit or a small non-domestic development, the Customer shall ensure that any Contractor engaged by them in relation to the Customer's Pipe Work has appropriate and adequate insurance cover in place throughout the duration of the works in relation to the matters referred to in Clauses 10. In particular, the Customer shall, within five days following a written request from Irish Water, furnish Irish Water with evidence that the insurances referred to below are being maintained by the Contractor:

20.3.1 **Employers Liability** insurance cover with a minimum indemnity limit of €13 million any one accident/occurrence unlimited in the period of insurance;
20.3.2 **Public/Products/Pollution Liability** insurance cover with a minimum indemnity limit of €6.5 million any one accident/occurrence unlimited in the period of insurance under the Public Liability and in the aggregate in respect of Products & Pollution Liability;
20.3.3 **Contractors "All Risks"** insurance for the full reinstatement value of the proposed works in respect of any one claim; and
20.3.4 **Motor** insurance cover with a minimum third party property damage limit of €6.5m for all vehicles owned, leased, rented or run (to include tool of trade use) by the Contractor in connection with the services to be provided by it.

The Insurance policies detailed in this Clause 20.3 with the exception of Motor must include a specific indemnity to Irish Water.

21. Data Protection:

21.1 It is necessary for Irish Water to collect and use personal data relating to the Customer in respect of this Connection Agreement, such as your name, address, contact details and financial information (depending on payment method). This data will be used to enable Irish Water to carry out its obligations under this Connection Agreement and manage its relationship with the Customer, such as arranging payments, visits to the Customer's Premises and scheduling construction activities. Irish Water may keep the Customer's data for a reasonable period after the Customer ceases to be supplied with

Water Services but will not keep it for any longer than is necessary and/or as required by law.

21.2 Irish Water may share the Customer's data with other members of the Ervia group and agents who act on behalf of Irish Water in connection with the activities referred to above. Such agents are only permitted to use the Customer's data as instructed by Irish Water. They are also required to keep the Customer's data safe and secure.

21.3 From time to time the Customer may speak to employees of Irish Water (or agents acting on its behalf) by telephone. To ensure that Irish Water can provide a quality service, telephone conversations with the Customer may be recorded. Irish Water will treat the recorded information as confidential and will only use it for staff training/quality control purposes, confirming details of the Customer's conversations with Irish Water or any other purposes mentioned in this notice.

21.4 The Customer has various rights under data privacy laws, which include the right to request a copy of his/her personal data. If the Customer wishes to avail of this right or for further information please contact Irish Water in writing at FREEPOST, Irish Water, Data Protection Officer, PO Box 6000, Talbot Street, Dublin 1 or via email to dataprotection@ervia.ie.

21.5 Irish Water endeavours to use appropriate technical and physical security measures to protect your personal data which is transmitted, stored or otherwise processed by Irish Water, from accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access. Irish Water's service providers are also selected carefully and required to use appropriate protective measures.

21 6 As effective as modern security practices are, no physical or electronic security system is entirely secure. The transmission of information via the internet is not completely secure. Although Irish Water will do its best to protect your data, Irish Water cannot guarantee the security of your data transmitted to Irish Water's Site. Any transmission of data is at your own risk. Once Irish Water receives your data, Irish Water will use appropriate security measures to seek to prevent unauthorised access. Irish Water will continue to revise policies and implement additional security features as new technologies become available.

21.7 In the event that there is an interception or unauthorised access to your personal data, Irish Water will not be liable or responsible for any resulting misuse of your personal information.

21 .8 For further information on how Irish Water treats the Personal Data of Customers when providing Water Services, please see our Privacy Notice on www.water.ie. Alternatively, please contact us at the details above for Irish Water's Privacy Notice.

21.9 In order to evaluate and improve our Customer's experience, we or agents on our behalf, may from time to time issue surveys to the Customer in relation to the services provided. If you do not wish to receive a survey, please let us know.

21.10 Irish Water reserves the right to change and/or update its Privacy Notice at any time in Irish Water's sole discretion. If Irish Water makes changes, Irish Water will publish same on www.water.ie.

22. **Safety, Health and Welfare at Work (Construction) Regulations 2013**: It is acknowledged and agreed that the works carried out for, or on behalf of, the Customer in relation to the Customer's Pipe Work are entirely separate and distinct to the Connection Works carried out for and on behalf of Irish Water. The Customer shall ensure full compliance with all applicable health and safety legislation including, if necessary and applicable, the Safety, Health and Welfare at Work (Construction) Regulations 2013 in respect of the works to the Customers Pipe Work. The Customer acknowledges that, as client, it may have certain obligations under the Safety, Health and Welfare at Work (Construction) Regulations 2013 in relation to the works to the Customer's Pipe Work and, as such, will ensure full compliance with those obligations. Irish Water shall ensure full compliance with all applicable health and safety legislation including, if necessary and applicable, the Safety, Health and Welfare at Work (Construction) Regulations 2013 in respect of the Connection Works. Irish Water acknowledges that, as client, it may have certain obligations under the Safety, Health and Welfare at Work (Construction) Regulations 2013 in relation to the Connection Work and, as such, will ensure full compliance with those obligations.

23. **No Waiver:** No forbearance, indulgence or relaxation on the part of a Party shown or granted to the other Party shall in any way affect, diminish, restrict or prejudice the rights or powers of Irish Water or operate as or be deemed to be a waiver of any breach of conditions. None of the provisions of this Connection Agreement shall be considered waived by a Party unless such waiver is given in writing and signed by a duly authorised representative of the Party making the waiver. No such waiver shall be a waiver of any past or future default or breach nor shall such waiver constitute a modification of any term provision condition or covenant of the contract unless expressly so provided in such waiver.

24. **Severability:** All of the provisions contained in this Connection Agreement are distinct and severable, and if any provision is held or declared to be unenforceable, illegal or void in the whole or in part by any court, regulatory authority or other Competent Authority it will, to that extent only, be deemed not to form part of this Connection Agreement and the enforceability, legality and validity of the remainder of these terms and conditions will not in any event be affected.

25. **Force Majeure:** If either Party is by reason of Force Majeure rendered unable wholly or in part to carry out its obligations under this Connection Agreement, then upon notice in writing of such Force Majeure from the Party affected to the other Party, as soon as possible after the occurrence of the cause relied on, the Party affected shall be released from its obligations (other than the obligations to pay money) and suspended from the exercise of its rights under the Connection Agreement to the extent to which they are affected by the circumstances of Force Majeure and for the period during which those circumstances exist PROVIDED THAT the Party affected shall use all reasonable endeavours to prevent, avoid, overcome or mitigate the effects of such occurrence.

26. **Entire Agreement:**

26.1 This Connection Agreement shall be the entire agreement between the Parties with respect to the subject matter and expressly excludes any warranty, condition or other undertaking implied at law or by custom and supersedes all previous agreements and

understandings between the Parties (other than as provided for in this Connection Agreement) with respect to its subject matter .

26.2 The Customer acknowledges and confirms that it does not enter into this Connection Agreement in reliance on any representation, any misrepresentation, warranty or other undertaking by Irish Water not fully reflected in this Connection Agreement.

26.3 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Connection Agreement.

27. **Amendments:** This Connection Agreement may be updated at any time by Irish Water with replacement terms and conditions published on www.water.ie.

28. **No Derogation from Statutory Responsibilities:**

The Customer acknowledges and accepts:

28.1 their obligations and duties under the Water Services Acts in relation to the protection of human health, repair of leaks and the reasonable conservation of water and the management, consumption and use of water on or at the Customer's Premises to ensure that water is not wasted or consumed in excessive amounts;

28.2 that notwithstanding this Connection Agreement, Irish Water is not limited from exercising its powers under the Water Services Acts in relation to the Customer;

28.3 without prejudice to Clauses 10.1.10 and 10.1.11 of these General Conditions and notwithstanding the carrying out of Connection Works, the Customer Pipe Work (in terms of ownership, maintenance, repair, renewal or otherwise) will remain the sole responsibility of the Customer unless ownership is transferred to Irish Water.

29. **Governing Law:** The Connection Agreement shall be governed and construed in accordance with the laws of Ireland and, subject to Clause 30, the courts of Ireland shall have exclusive jurisdiction to decide disputes arising between the Customer and Irish Water.

30. **Dispute Resolution:**

30.1 **Notification of a Dispute:** Any Dispute between the Parties shall be resolved, if possible, by negotiation. In the event that no agreement is reached within fifteen (15) days of the date on which either Party first notified the other Party that a Dispute exists, either Party shall have the right to have the Dispute determined in accordance with Clause 30.2.

30.2 **Mediation:** The mediator is to be appointed by agreement between the Parties and, in the absence of agreement within five (5) working days of the receipt by one Party of a written notice to concur in the appointment of a mediator, by the Centre for Effective Dispute Resolution ("**CEDR**"). The mediation will be in Dublin and the costs of the mediation shall be shared equally between the Parties. In the event that the matter is not resolved within three (3) months of being referred to the mediator under

this Clause 30.2, then either Party may (but for the avoidance of doubt not be obliged to do so) commence court proceedings for the determination of the Dispute in question.

30.3 **Performance to Continue During Dispute:** Insofar as practicable, the Parties shall continue to implement the terms of this Connection Agreement notwithstanding the initiation of mediation or Court proceedings and any pending Dispute. No payment due to or payable by Irish Water or the Customer shall be withheld on account of a pending reference to the dispute resolution mechanism except to the extent that such payment is the subject of such dispute. However, Irish Water shall not be obliged to carry out the Connection Works unless it is in receipt of the Connection Costs.

30.4 **Survival:** The provisions of Clause 30.2 and 30.3 shall continue after the termination of this Connection Agreement where notice of the existence of the Dispute was given under Clause 30.1 prior to termination. Nothing in this Connection Agreement is intended to prejudice the referral of a dispute to the Commission for Regulation of Utilities for determination in accordance with Irish Water's Customer Handbook.

31. New Industry Structure

31.1 If, after execution of this Connection Agreement, there shall be enacted and brought into force any Legal Requirement for:

31.1.1 the further reorganisation of the water industry in Ireland or any material part of it;

31.1.2 the further facilitation of the introduction of third party interests into the affairs of the water industry in Ireland or any part of it; or

31.1.3 the amendment or variation of any policy of Irish Water or the manner in which the Network(s) and any agreements or protocols related thereto are organised;

which necessitates a variation to this Connection Agreement, the Parties shall effect such changes as are reasonably necessary so as to ensure that the operations contemplated by this Connection Agreement shall be conducted in a manner which is consistent with the effect of the new Legal Requirement and most closely reflects the intentions of the same with effect from the date thereof provided that any such amendment will be of no greater extent than is required by reason of the same.

31.2 If any variation proposed under Clause 31.1 has not been agreed by the Parties within three (3) months of it being proposed (the Parties acting as soon as reasonably practicable), either Party may refer to the Commission for Regulation of Utilities for determination and the Parties agree to abide by and to give effect to the Commission's determination, if necessary by entering into an agreement supplemental to this Connection Agreement.

APPENDIX 3

Special Conditions

The purpose of this Connection Agreement is to facilitate a connection between the Customer's Premises and the Wastewater Network at the Connection Point.

For the purposes of this Connection Agreement, the Parties agree:

1. that Customer's Pipe Work shall include a private rising main [including a pumping station] and stand-off manhole in the public road between the Customer's Premises and the Connection Point(approx. 6meters from the stand-off manhole; and
2. the modification of elements of the existing Wastewater Network, by agreement with Irish Water to facilitate the regulation of flows from the Customer's Premises to the Wastewater Network in certain circumstances (the costs of which shall be borne by the Customer).

Arising from the above, the Customer acknowledges and agrees as follows:

a) the definition of *Customer's Pipe Work* shall be amended as follows:

"Customer's Pipe Work" means the pipe, relating fittings and associated accessories to be laid by the Customer in accordance with Relevant Standards and Applicable Laws, and the Distribution System (if connecting to the Waterworks) and the Drain (if connecting to the Wastewater Works), to be used to connect the Customer's Premises at a Connection Point;

b) for the avoidance of any doubt, any elements of the Customer's Pipe Work constructed by the Customer outside of the Customer's Premises will not vest in Irish Water and shall remain entirely the responsibility of the Customer;

c) the Connection Facilities, to be constructed by Irish Water, shall consist of a six-metre section of gravity wastewater pipe between the stand-off manhole (to be constructed as part of the Customer's Pipe Work) and the existing Wastewater Network;

d) the Customer shall be entirely responsible for obtaining any relevant consents, including planning permission, road opening licence, discharge licence, etc. which are required for the construction and operation of any pipe work necessary to connect the Customer's Premises to the Wastewater Network including the Customer's Pumping Station, Pipe Work and the Connection Facilities. Copies of the said permissions/consents or, alternatively, confirmation of any exemptions from the requirement to obtain such permissions/consents, shall be provided to Irish Water as a pre-condition to completion of the Connection Facilities and tie-in to the Wastewater Network;

e) as a pre-condition to commencement of construction of the Customer's Pipe Work, the Customer shall;

i. submit all designs and control processes necessitated by the Customer's Pipe Work and the [likely] impact of discharges on the Irish Water Network to Irish Water for review and approval;

ii. agree all relevant access requirements to Irish Water's existing Wastewater Network, Wastewater Treatment Plant (the "**WWTP**"), and associated pumping stations;

iii. submit construction methodologies, RAMs, etc. to Irish Water for approval;

f) the Customer's Pipe Work shall include:

i. actuated valves on the rising mains to shut the rising mains automatically if the water level at Bachelor's Walk Storm Water Overflow (SWO) rises above a predetermined high level in advance of an overflow occurring. A facility shall be provided in the control panel in the Customers Pumping Station to allow manual operation by Uisce Eireann personnel of the valve in case of an emergency. The final location of actuated valves shall be determined at detailed design stage with consideration given to locating them at the rising main discharge point;

ii. a pressure switch shall be provided in the Customer's Pipe Work at [the point shown X on Drawing No. [ ]] to inhibit pump operation if the pressure exceeds a pre-set setpoint;

iii. flowmeters on the new rising mains to relay readings to the Irish Water Scada system at the Wicklow WWTP. The Customer shall be responsible for all required works at their site and at the WWTP;

iv. adequate storage within the Customer's private pumping station to retain flows during periods when the actuated valves on the Customer's rising mains are closed and when forward pumping is not permitted;

v. the level sensors and associated equipment installed as part of the existing Wastewater Network shall be connected to mains power;

g) Modification of Existing Wastewater Network

i. the Customer shall design, install and commission a level sensor in the stormwater overflow chamber at Bachelor's Walk SWO (SCH0000469). The level sensor shall be required to be connected to the Customer's private pumping station via radio link. When the level in the Wastewater Network reaches a pre-determined set point (before overflow occurs), a signal should be sent to the Customer's private pumping station to turn of the pumps. A further signal will then be sent to the Customer's private pumping station to recommence pumping when the level at the stormwater overflow drops.

ii. **Murrough Pump Station Pump Failure**

The Customer shall design, install and commission a telemetry link between the Murrough pump station and Customer's private pumping station that will send a send a signal to the Customer's private pumping station to stop pumping in the event of a failure of the Murrough pumps. A further signal will then be sent to the Customer's private pumping station to recommence pumping when Murrough pump station returns to normal operation.

h) Post-Construction Hand-Over

i. the Customer shall carry out a handover demonstration to UÉ Operations team (Wicklow Co.Co. Water Services);

ii. the Customer shall provide a safety file to UÉ for any equipment installed within the existing Wastewater Network. The Safety file shall, at a minimum, include as built drawings, commissioning records, calibration records and O&M manuals;

iii. all level sensors and their associated kiosks and local controls will be vested in Irish Water upon connection of the Customer's Premises to the Wastewater Network.

Notes

SECTION 3.0 – Special Conditions pertaining to the Water/Wastewater Service Connection(s)

SECTION 3.1 - Water Service Connection(s)

SECTION 3.2 - Wastewater Service Connection(s)

1	Distance from Customer's Premises to Connection Point in metres (Service Connection).	4,300.00	m
2	Diameter of Service Connection required (internal diameter in mm)	150	mm
3	Distance from Service Connection Point to the existing mains in metres (Mains Extension).	4300	m

4 Prior to any tie-in to the Network(s) being made, the Customer must have obtained a Trade Effluent Discharge Authorisation.

Trade Effluent Discharge Authorisation means:

- a trade effluent discharge licence issued to the Customer by Irish Water under section 16 of the Local Government (Water Pollution) Act, 1977 (as amended); or
- a trade effluent discharge licence issued to the Customer by Irish Water under section 63 of the Water Services Act, 2007 (as amended); or
- an industrial emissions (IE) licence, integrated pollution control (IPC) licence, or waste facility licence issued to the Customer by the Environmental Protection Agency,

as the case may be.

To apply to Irish Water for a trade effluent discharge licence or to learn more about trade effluent please visit www.water.ie/tradeeffluent

Any failure by the Customer to obtain a Trade Effluent Discharge Authorisation, where required, will result in Irish Water refusing to accept discharges to its Network(s).

6 Uisce Eireann will deliver the final tie in connection to the network from the stand off manhole, the Customer is responsible for the construction of the private rising main and all associated consents required, The Customer should contact Uisce Eireann operations to organise the tie-in to the Wastewater Network and al lassociated works downstream.

7 The design & construction of the new proposed wastewater connection to be in accordance with the IW Codes of Practice and Standard Details. These are available from the IW website at www.water.ie/connections

8	No storm runoff shall drain to the public foul sewer
9	
10	

APPENDIX 4

Connection Charge

Connection Charge		
Wastewater Connection Charge		
	Standard Charge	€23,344.00
	Standard Charge – Additional Service Length	€0.00
	Quotable Charge	
	Sub total	**€23,344.00**
Total Connection Charge		**€23,344.00**