

EPA Application Form

7.7 - Discharges to Storm Water - Attachment

Organisation Name: *

Bord na Móna Public Limited Company

Application I.D.: *

LA001696

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Authorisation Application Form

Amendments to this Application Form Attachment

Version No.	Date	Amendment since previous version	Reason
V.1.0	July 2017	N/A	Online application form attachment
As above	Mar 2018	Identification of required fields	Assist correct completion of attachment

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Storm Water Discharge Points

Storm water is rain water run-off from roof and non-process areas

Complete the table below for all storm water discharge points – (one row per discharge point).

Note: This section is **NOT** for rain water run-off from areas used for the outdoor storage of waste **OR** run-off from process areas likely to be contaminated.
(Process effluent discharges and emissions should be described in the **7.2 Emissions to Water** tab of the application form).

Discharge Point Code *	Easting * ¹	Northing * ²	Discharges to? (enter relevant option) * ³	Description of Discharge Point and Controls *	Name of receiving water (where applicable) *	Receiving Water Code (where applicable) *
SW5	E274059	N230848	River	Outlet from existing bog attenuation pond into River Cushaling.	River Cushaling	14_352
SW6	E274435	N231513	Surface Water Drain	Outflow from Integrated Constructed Wetlands (ICWs) into surface water drainage network flowing towards SW5.	River Cushaling	14_352
SW9	E274215	N231353	Surface Water Drain	Outflow from Integrated Constructed Wetlands (ICWs) into surface water drainage network flowing towards SW5.	River Cushaling	14_352
SW10	E274323	N231018	Surface Water Drain	Outflow from Integrated Constructed Wetlands (ICWs) into surface water	River Cushaling	14_352

¹ Six Digit GPS Irish National Grid Reference

² Six Digit GPS Irish National Grid Reference

³ Options: 'River', 'Ditch', 'Estuary', 'Lake', 'Land Drain', 'Foul Sewer', 'Percolation Area', 'Groundwater', 'Storm Sewer' or 'Other' (where 'Other' is selected please enter a description)

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Discharge Point Code *	Easting * ¹	Northing * ²	Discharges to? (enter relevant option) * ³	Description of Discharge Point and Controls *	Name of receiving water (where applicable) *	Receiving Water Code (where applicable) *
				drainage network flowing towards SW5.		
SW11	E275210	N230910	Surface Water Drain	Outflow from Integrated Constructed Wetlands (ICWs) into surface water drainage network flowing towards SW5.	River Cushaling	14_352
SW12	E274221	N231294	Surface Water Drain	Outflow from Integrated Constructed Wetlands (ICWs) into surface water drainage network flowing towards SW5.	River Cushaling	14_352

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*add rows to the table as necessary

* indicates required field



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Storm Water Discharge Monitoring Points

Enter the Discharge Point Code, the associated Monitoring Point Code and the grid reference details for each Monitoring Point location.

Discharge Point Code*	Monitoring Point Code*	Easting * ⁴	Northing * ⁵
SW5	SW5	E274059	N230848
SW6	SW6	E274435	N231513
SW9	SW9	E274215	N231353
SW10	SW10	E274323	N231018
SW11	SW11	E275210	N230910
SW12	SW12	E274221	N231294

*add rows to the table as necessary

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⁴ Six Digit GPS Irish National Grid Reference

⁵ Six Digit GPS Irish National Grid Reference

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Storm Water Trigger Levels and Monitoring

Complete the table below with details of the trigger levels and proposed monitoring regime for each parameter.

Select parameters that are a good indicator of loss of containment on-site. Consult the EPA guidance in the setting of trigger values for storm water discharges to off-site surface wastes at EPA licensed facilities (2012).

(If different parameters or monitoring arrangements apply at different storm water discharge points include information on this within the table).

Parameter*	Trigger Level *	How was the trigger level determined? *	Proposed Monitoring Frequency * ⁶	Sampling / Monitoring	
				Sample Method * ⁷	Analysis Method and Technique * ⁸
Biological (SW4 Only)	Not Applicable	Not Applicable	Annual	Kick Sampling	Determination of Q-Value
SW4, SW6, SW9, SW10, SW11, SW12:					
Visual Inspection/Odour	Not Applicable	Not Applicable	Daily	Visual/Olfactory	Visual/Olfactory
Lagoon Level	Not Applicable	Not Applicable	Daily	Not Applicable	Monitoring of lagoon levels and volume of surface water discharged to be controlled through SCADA system.
Electrical Conductivity	Not Applicable	Not Applicable	Continuous	Conductivity meter	In-situ calibrated conductivity meter
Dissolved Oxygen	Not Applicable	Not Applicable	Continuous	Dissolved oxygen meter	In-situ calibrated dissolved oxygen meter
Chloride	Not Applicable	Not Applicable	Weekly	Grab Sampling	G/39: Ion Chromatography or similar approved method

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⁶ Option list: 'Continuous', 'Hourly', 'Daily', 'Weekly', 'Monthly', 'Quarterly', 'Biannually' OR 'Annually'.

⁷ Option list: 'Continuous', '24-hour Flow Proportional Composite', '24-hour Time Proportional Composite' OR 'Grab'.

⁸ Option list: 'Gravimetric', 'Online Calibrated Suspended Solids', 'Online Flow Meter with Recorder', 'Online pH electrode/probe Meter and Recorder', 'Online Temperature Probe with Recorder', 'Standard Method', 'Visual', OR 'To be agreed by the Agency'.

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Parameter*	Trigger Level*	How was the trigger level determined?*	Proposed Monitoring Frequency* ⁶	Sampling / Monitoring	
				Sample Method* ⁷	Analysis Method and Technique* ⁸
pH	Not Applicable	Not Applicable	Weekly	Grab Sampling	G/05: Based on APHA 2012, 22 nd Ed, Method 4500 H+B or similar approved method
Ammoniacal Nitrogen	0.5 mg/l	ELV set in existing licence (W0201-03)	Weekly	Grab Sampling	G/67: Based on APHA, 2012, 22 nd Ed, 4500-NH ₃ & Bluebook Ammonia in Waters 1981 or similar approved method
Total Suspended Solids	35 mg/l	ELV set in existing licence (W0201-03)	Weekly	Grab Sampling	G/19: Based on APHA, 2012, 22 nd Edition, Method 2540D or similar approved method
Nitrate	Not Applicable	Not Applicable	Annually	Grab Sampling	G/39: Ion Chromatography or similar approved method
Sulphate (SO ₄)	Not Applicable	Not Applicable	Annually	Grab Sampling	G/39: Ion Chromatography or similar approved method
Chemical Oxygen Demand	Not Applicable	Not Applicable	Quarterly	Grab Sampling	G/03: Based on APHA 2012, 22 nd Edition, Method 5220D or similar approved method
Biochemical Oxygen Demand	25 mg/l	ELV set in existing licence (W0201-03)	Quarterly	Grab Sampling	G/04: Based on APHA, 2012, 22 nd Ed, Method 5210B or similar approved method
Total Phosphate/Orthophosphate	Not Applicable	Not Applicable	Annually	Grab Sampling	G/39: Ion Chromatography or similar approved method
Potassium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method
Sodium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method
Calcium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method

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Parameter*	Trigger Level*	How was the trigger level determined?*	Proposed Monitoring Frequency* ⁶	Sampling / Monitoring	
				Sample Method* ⁷	Analysis Method and Technique* ⁸
Magnesium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method
Iron	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Manganese	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Zinc	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Lead	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Copper	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Mercury	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Nickel	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method

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Parameter*	Trigger Level*	How was the trigger level determined?*	Proposed Monitoring Frequency* ⁶	Sampling / Monitoring	
				Sample Method* ⁷	Analysis Method and Technique* ⁸
Chromium (total)	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Cadmium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Boron	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
List I/II Organic Substances (Screen) [#]	Not Applicable	Not Applicable	Annually	Grab Sampling	G/61: Based on USEPA 524.2 Method or TM/143DGC-MS - following extraction with 1:1 DCM/Ethyl Acetate or similar approved method
Total Coliform	Not Applicable	Not Applicable	Annually	Grab Sampling	D/1201 MPN based on IDEXX defined substrate method or similar approved method
Faecal Coliform	Not Applicable	Not Applicable	Annually	Grab Sampling	D/3221 or similar approved method
SW5:					
Visual Inspection/Odour	Not Applicable	Not Applicable	Daily	Visual/Olfactory	Visual/Olfactory
Electrical Conductivity	Not Applicable	Not Applicable	Weekly	Conductivity meter	In-situ calibrated conductivity meter
Dissolved Oxygen	Not Applicable	Not Applicable	Weekly	Dissolved oxygen meter	In-situ calibrated dissolved oxygen meter

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Parameter*	Trigger Level *	How was the trigger level determined? *	Proposed Monitoring Frequency * ⁶	Sampling / Monitoring	
				Sample Method * ⁷	Analysis Method and Technique * ⁸
Chloride	Not Applicable	Not Applicable	Weekly	Grab Sampling	G/39: Ion Chromatography or similar approved method
pH	Not Applicable	Not Applicable	Weekly	Grab Sampling	G/05: Based on APHA 2012, 22 nd Ed, Method 4500 H+B or similar approved method
Ammoniacal Nitrogen	0.5 mg/l	ELV set in existing licence (W0201-03)	Weekly	Grab Sampling	G/67: Based on APHA, 2012, 22 nd Ed, 4500-NH ₃ & Bluebook Ammonia in Waters 1981 or similar approved method
Total Suspended Solids	35 mg/l	ELV set in existing licence (W0201-03)	Weekly	Grab Sampling	G/19: Based on APHA, 2012, 22 nd Edition, Method 2540D or similar approved method
Nitrate	Not Applicable	Not Applicable	Annually	Grab Sampling	G/39: Ion Chromatography or similar approved method
Sulphate (SO ₄)	Not Applicable	Not Applicable	Annually	Grab Sampling	G/39: Ion Chromatography or similar approved method
Chemical Oxygen Demand	Not Applicable	Not Applicable	Quarterly	Grab Sampling	G/03: Based on APHA 2012, 22 nd Edition, Method 5220D or similar approved method
Biochemical Oxygen Demand	25 mg/l	ELV set in existing licence (W0201-03)	Quarterly	Grab Sampling	G/04: Based on APHA, 2012, 22 nd Ed, Method 5210B or similar approved method
Total Phosphate/Orthophosphate	Not Applicable	Not Applicable	Annually	Grab Sampling	G/39: Ion Chromatography or similar approved method
Potassium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method
Sodium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method

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Parameter*	Trigger Level*	How was the trigger level determined?*	Proposed Monitoring Frequency* ⁶	Sampling / Monitoring	
				Sample Method* ⁷	Analysis Method and Technique* ⁸
Calcium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method
Magnesium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM228 USEPA Method 6010B or similar approved method
Iron	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Manganese	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Zinc	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Lead	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Copper	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Mercury	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Nickel	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B,

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Parameter*	Trigger Level*	How was the trigger level determined?*	Proposed Monitoring Frequency* ⁶	Sampling / Monitoring	
				Sample Method* ⁷	Analysis Method and Technique* ⁸
					AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Chromium (total)	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Cadmium	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
Boron	Not Applicable	Not Applicable	Annually	Grab Sampling	TM152 Method 3125B, AWWA/APHA, 20 th Ed. 1999 (ICP-MS) or similar approved method
List I/II Organic Substances (Screen) [#]	Not Applicable	Not Applicable	Annually	Grab Sampling	G/61: Based on USEPA 524.2 Method or TM/143DGC-MS - following extraction with 1:1 DCM/Ethyl Acetate or similar approved method
Total Coliform	Not Applicable	Not Applicable	Annually	Grab Sampling	D/1201 MPN based on IDEXX defined substrate method or similar approved method
Faecal Coliform	Not Applicable	Not Applicable	Annually	Grab Sampling	D/3221 or similar approved method

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*add rows to the table as necessary

[#] Screening for priority pollutant list substances (such as US EPA volatile or semi volatile compounds)

* indicates required field



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If not provided for in the table above, upload a document that includes details of how storm water is proposed to be monitored (select Document Type: '**Storm Water Monitoring**' in the application form).

Storm Water Monitoring document file name:

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