Agglomeration details

Leading Local Authority	Monaghan County Council
Co-Applicants	
Agglomeration	Castleblayney Wastewater Treatment Works
Population Equivalent	5692
Level of Treatment	Preliminary, Secondary and Biological
Treatment plant address	Muckno Street Castleblayney Co. Monaghan
Grid Ref (12 digits, 6E, 6N)	282914 / 319951
EPA Reference No:	

Contact details

Contact Name:	Mr. Mark Johnston
Contact Address:	County Offices The Glen Monaghan
Contact Number:	047 30500
Contact Fax:	047 82739
Contact Email:	mjohnston@monaghancoco.ie

Table D.1(i)(a): EMISSIONS TO SURFACE/GROUND WATERS (Primary Discharge Point)

Discharge Point Code: SW-1

Local Authority Ref No:		
Source of Emission:	Castleblayney Waste Water Treatment Works	
Location:	Muckno Street, Castleblayney, Co.Monaghan	
Grid Ref (12 digits, 6E, 6N)	283041 / 319961	
Name of Receiving waters:	Lough Muckno	
River Basin District	North Eastern RBD	
Designation of Receiving Waters:	Not Applicable	
Flow Rate in Receiving Waters:	1.583	$m^3.sec^{-1}$ Dry Weather Flow
	0.1	$m^3.sec^{-1}$ 95% Weather Flow

Emission Details:

(i) Volume emitted			
Normal/day	1800 m^3	Maximum/day	2000 m^3
Maximum rate/hour	83.33 m^3	Period of emission (avg)	60 min/hr 24 hr/day 365 day/yr
Dry Weather Flow	0.01482 m^3/sec		

Table D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
pH	pH	24 hr flow proportional	=7.4	
Temperature	°C	24 hr flow proportional	=14	
Electrical Conductivity (@ 25°C)	µS/cm	24 hr flow proportional	=689	
Suspended Solids	mg/l	24 hr flow proportional	<3	5.4
Ammonia (as N)	mg/l	24 hr flow proportional	=18.97	34.15
Biochemical Oxygen Demand	mg/l	24 hr flow proportional	=16	0.03
Chemical Oxygen Demand	mg/l	24 hr flow proportional	=33	1.8
Total Nitrogen (as N)	mg/l	24 hr flow proportional	=20.16	36.29
Nitrite (as N)	mg/l	24 hr flow proportional	=0.02	0.04
Nitrate (as N)	mg/l	24 hr flow proportional	<0.09	0.16
Total Phosphorous (as P)	mg/l	24 hr flow proportional	=1.097	1.97
OrthoPhosphate (as P)	mg/l	24 hr flow proportional	=1.04	1.87
Sulphate (SO_4)	mg/l	24 hr flow proportional	=55.56	100.01
Phenols (Sum)	µg/l	24 hr flow proportional	<0.1	0

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45m filter paper
For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Table D.1(i)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
Atrazine	µg/l	24 hr flow proportional	<0.01	0
Dichloromethane	µg/l	24 hr flow proportional	=1998.19	3.6
Simazine	µg/l	24 hr flow proportional	<0.01	0
Toluene	µg/l	24 hr flow proportional	<1	0
Tributyltin	µg/l	24 hr flow proportional	<0.02	0
Xylenes	µg/l	24 hr flow proportional	<1	0
Arsenic	µg/l	24 hr flow proportional	=1	0
Chromium	µg/l	24 hr flow proportional	=1	0
Copper	µg/l	24 hr flow proportional	=5	1.24
Cyanide	µg/l	24 hr flow proportional	<5	0.01
Flouride	µg/l	24 hr flow proportional	=0.56	1.01
Lead	µg/l	24 hr flow proportional	=3	0.01
Nickel	µg/l	24 hr flow proportional	=3	0.01
Zinc	µg/l	24 hr flow proportional	=19.9	0.04
Boron	µg/l	24 hr flow proportional	=199	0.36
Cadmium	µg/l	24 hr flow proportional	<0.09	0
Mercury	µg/l	24 hr flow proportional	<0.2	0
Selenium	µg/l	24 hr flow proportional	=2	0
Barium	µg/l	24 hr flow proportional	=15	0.03

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45m filter paper
For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Table D.1(iii)(a): EMISSIONS TO SURFACE/GROUND WATERS (Storm Overflow)

Discharge Point Code: SW-2

Local Authority Ref No:		
Source of Emission:	Castleblayney Waste Water Treatment Works	
Location:	Lakeview, Castleblayney, Co.Monaghan	
Grid Ref (12 digits, 6E, 6N)	282879 / 320154	
Name of Receiving waters:	Lough Muckno	
River Basin District	North Eastern RBD	
Designation of Receiving Waters:	Not Applicable	
Flow Rate in Receiving Waters:	1.583	$m^3.sec^{-1}$ Dry Weather Flow
	0.1	$m^3.sec^{-1}$ 95% Weather Flow

Emission Details:

(i) Volume emitted			
Normal/day	0 m^3	Maximum/day	0 m^3
Maximum rate/hour	0 m^3	Period of emission (avg)	0 min/hr 0 hr/day 0 day/yr
Dry Weather Flow	0 m^3/sec		

TABLE E.1(i): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m3/annum)
SW-1	365	657000

TABLE E.1(ii): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Storm Water Overflows

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m3/annum)	Complies with Definition of Storm Water Overflow
SW-2	0	0	Yes

TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1d
Grid Ref (12 digits, 6E, 6N)	283132 / 319880

Parameter	Results (mg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	16/06/08						
pH	= 7.5				Grab	0.01	Method 4500-H+/Electrometry
Temperature	= 13.8				Grab	0	0
Electrical Conductivity (@ 25°C)	= 316				Grab	0.5	Method 2510 B/Electrometry
Suspended Solids	= 105				Grab	3	Method 2540 D/Filtration/Dry in 104C
Ammonia (as N)	= 0.43				Grab	0.06	Method 4500NH3F/Colorimetry
Biochemical Oxygen Demand	= 4				Grab	2	Method5210 B/Electrometry
Chemical Oxygen Demand	= 55				Grab	5	Method5220 D/Spectrophotmetry
Dissolved Oxygen	= 0				Grab	0	0
Hardness (as $CaCO_3$)	= 0				Grab	0	0
Total Nitrogen (as N)	= 5.11				Grab	1	Calculation
Nitrite (as N)	= 0.02				Grab	0.003	Method 4500-NO2-B/colorimetry
Nitrate (as N)	< 0.09				Grab	0.09	Method 4500-NO3-H/Colorimetry
Total Phosphorous (as P)	= 0.192				Grab	0.042	Method 4500-P E/Colorimetry
OrthoPhosphate (as P)	< 0.006				Grab	0.004	Method 4500-P E/Colorimetry
Sulphate (SO_4)	= 28.15				Grab	1.39	Method 4500-SO42-E/Colorimetry
Phenols (Sum)	< 0.1				Grab	0.1	EPA Method 525 GCMS

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45m filter paper
For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1d
Grid Ref (12 digits, 6E, 6N)	283132 / 319880

Parameter	Results (µg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	16/06/08						
Atrazine	< 0.01				Grab	0.01	USEPA Method 610 HPLC
Dichloromethane	= 2047.972				Grab	1	USEPA Method 524 GCMS
Simazine	< 0.01				Grab	0.01	USEPA Method 610 HPLC
Toluene	< 1				Grab	1	USEPA Method 524.2 GCMS
Tributyltin	< 0.02				Grab	0.02	Subcontracted Test GCMS
Xylenes	< 1				Grab	1	USEPA Method 524.2 GCMS
Arsenic	= 3				Grab	0.96	Method 3125B ICPMS
Chromium	= 3				Grab	0.93	Method 3125B ICPMS
Copper	= 11				Grab	0.2	Method 3125B ICPMS
Cyanide	= 7				Grab	5	Hach Water Analysis Handbook 2nd edition
Flouride	= 0.15				Grab	0.03	Method 4500 F-- E Colorimetry
Lead	= 9				Grab	0.38	Method 3125B ICPMS
Nickel	= 11				Grab	0.47	Method 3125B ICPMS
Zinc	= 77.6				Grab	4.6	Method 3125B ICPMS
Boron	= 210				Grab	4.2	Method 3125B ICPMS
Cadmium	< 0.09				Grab	0.09	Method 3125B ICPMS
Mercury	< 0.2				Grab	0.2	Method 3125B ICPMS
Selenium	= 2				Grab	0.74	Method 3125B ICPMS
Barium	= 55				Grab	0.74	Method 3125B ICPMS

TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1u
Grid Ref (12 digits, 6E, 6N)	283028 / 319980

Parameter	Results (mg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	16/06/08						
pH	= 7.5				Grab	0.01	Method 4500-H+/Electrometry
Temperature	= 13.8				Grab	0	0
Electrical Conductivity (@ 25°C)	= 244				Grab	0.5	Method 2510 B/Electrometry
Suspended Solids	= 4				Grab	3	Method 2540 D/Filtration/Dry in 104C
Ammonia (as N)	= 0.13				Grab	0.06	Method 4500NH3F/Colorimetry
Biochemical Oxygen Demand	= 3				Grab	2	Method5210 B/Electrometry
Chemical Oxygen Demand	= 32				Grab	5	Method5220 D/Spectrophotmetry
Dissolved Oxygen	= 0				Grab	0	0
Hardness (as $CaCO_3$)	= 0				Grab	0	0
Total Nitrogen (as N)	= 2.53				Grab	1	Calculation
Nitrite (as N)	= 0.011				Grab	0.003	Method 4500-NO2-B/colorimetry
Nitrate (as N)	= 0.28				Grab	0.09	Method 4500-NO3-H/Colorimetry
Total Phosphorous (as P)	= 0.159				Grab	0.042	Method 4500-P E/Colorimetry
OrthoPhosphate (as P)	= 0.01				Grab	0.004	Method 4500-P E/Colorimetry
Sulphate (SO_4)	= 22.89				Grab	1.39	Method 4500-SO42-E/Colorimetry
Phenols (Sum)	= 0.1				Grab	0.1	EPA Method 525 GCMS

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45m filter paper
For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1u
Grid Ref (12 digits, 6E, 6N)	283028 / 319980

Parameter	Results (µg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	16/06/08						
Atrazine	< 0.01				Grab	0.01	USEPA Method 610 HPLC
Dichloromethane	= 2030.371				Grab	1	USEPA Method 524 GCMS
Simazine	< 0.01				Grab	0.01	USEPA Method 610 HPLC
Toluene	< 1				Grab	1	USEPA Method 524.2 GCMS
Tributyltin	< 0.02				Grab	0.02	Subcontracted Test GCMS
Xylenes	< 1				Grab	1	USEPA Method 524.2 GCMS
Arsenic	= 1				Grab	0.96	Method 3125B ICPMS
Chromium	= 1				Grab	0.93	Method 3125B ICPMS
Copper	= 7				Grab	0.2	Method 3125B ICPMS
Cyanide	< 5				Grab	5	Hach Water Analysis Handbook 2nd edition
Flouride	= 0.11				Grab	0.03	Method 4500 F-- E Colorimetry
Lead	= 3				Grab	0.38	Method 3125B ICPMS
Nickel	= 6				Grab	0.47	Method 3125B ICPMS
Zinc	= 20				Grab	4.6	Method 3125B ICPMS
Boron	= 145				Grab	4.2	Method 3125B ICPMS
Cadmium	< 0.09				Grab	0.09	Method 3125B ICPMS
Mercury	< 0.2				Grab	0.2	Method 3125B ICPMS
Selenium	= 2				Grab	0.74	Method 3125B ICPMS
Barium	= 30				Grab	0.74	Method 3125B ICPMS

Annex 2: Check List For Regulation 16 Compliance

Regulation 16 of the waste water discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007) sets out the information which must, in all cases, accompany a discharge licence application. In order to ensure that the application fully complies with the legal requirements of regulation 16 of the 2007 Regulations, all applicants should complete the following.

In each case, refer to the attachment number(s), of your application which contains(s) the information requested in the appropiate sub-article.

Regulation 16(1) **In the case of an application for a waste water discharge licence, the application shall -**		**Attachment Number**	**Checked by Applicant**
(a)	give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office or principal office,		
(b)	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,		
(c)	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates,		
(d)	state the population equivalent of the agglomeration to which the application relates,		
(e)	specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge,		
(f)	give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge.		
(g)	identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges,		
(h)	in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,		
(i)	describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges,		
(j)	give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points,		
(k)	give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges,		
(l)	give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations,		
(m)	give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work.		
(n)	Any other information as may be stipulated by the Agency.		
Regulation 16(3) **Without prejudice to Regulation 16 (1) and (2), an application for a licence shall be accompanied by -**		**Attachment Number**	**Checked by Applicant**
(a)	a copy of the notice of intention to make an application given pursuant to Regulation 9,		
(b)	where appropriate, a copy of the notice given to a relevant water services authority under Regulation 13,		
(c)	Such other particulars, drawings, maps, reports and supporting documentation as are necessary to identify and describe, as appropriate -		
(c) (i)	the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and		
(c) (ii)	the point or points at which monitoring and sampling are undertaken or are to be undertaken,		
(d)	such fee as is appropriate having regard to the provisions of Regulations 38 and 39.		

Regulation 16(4) An original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency.		Attachment Number	Checked by Applicant
1	An Original Application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under regulation 16(3) in hardcopy or in electronic or other format as specified by the agancy.		
Regulation 16(5) **For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency, be submitted in an electronic or other format specified by the Agency.**		**Attachment Number**	**Checked by Applicant**
1	Signed original.		
2	2 hardcopies of application provided or 2 CD versions of application (PDF files) provided.		
3	1 CD of geo-referenced digital files provided.		
Regulation 17 **Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency**		**Attachment Number**	**Checked by Applicant**
3	2 CD versions of EIS, as PDF files, provided.		
1	EIA provided if applicable		
2	2 hardcopies of EIS provided if applicable.		