

EPA Application Form

7.2 - Emissions to Surface Water - Attachment

Organisation Name: *

Donegal County Council

Application I.D.: *

LA007427

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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Authorisation Application Form

Emissions to Surface Water

This part of the application form collects data on waste water emissions to surface water.

Please note that the emission limit values and monitoring requirements specified in a licence, if granted, shall be based on the information supplied hereunder. (Details of discharges to **storm water** are **NOT** to be entered here but should be included in tab 7.7 of the application form (Discharges to Storm Water).

Waste Water to Surface Water - Emission Point Details - one row per emission point * (see **Note i** at end of this attachment)

(Details for discharges to **storm water** are **NOT** to be entered here)

| Emission Point Code ¹ | What is the Emission Source? | Easting ² (6 digit) | Northing ³ (6 digit) | Typical Days Usage/Year | Measures to reduce /minimise / prevent emissions (list techniques) <i>Where EQS considerations require measures stricter than BAT, highlight these measures in bold</i> | Type of Receiving Water ⁴ | Receiving Water Code <i>(or name where no code is available)</i> |
|----------------------------------|---------------------------------------|-----------------------------------|------------------------------------|-------------------------|--|--|---|
| D1 | Integrated Constructed Wetlands (ICW) | 193128 | 367882 | 365 | The assimilative capacity assessments and mass balance calculations have been calculated to measure the receiving water body's ability to assimilate the residual pollutants in the treated effluent discharged from the Integrated Constructed Wetlands, based on the above discharge concentrations, whilst still maintaining an acceptable level of water quality that will ensure the Environmental Objectives of the water body are not compromised. Details of the | An unnamed stream located along the western boundary of the site and down-gradient of the proposed development site, flows in a north, north-western direction before disappearing underground and | unnamed stream located along the western boundary of the site |

¹ The following convention should be observed when labelling emission points to surface water:

SW1, SW2, etc.

² Six Digit GPS Irish National Grid Reference

³ Six Digit GPS Irish National Grid Reference

⁴ Type of Receiving Water options: '**River**', '**Ditch**', '**Estuary**', '**Lake**', '**Land Drain**' or '**Other**' (where '**Other**' is selected please enter a description)

* indicates required field



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| Emission Point Code ¹ | What is the Emission Source? | Easting ² (6 digit) | Northing ³ (6 digit) | Typical Days Usage/ Year | Measures to reduce /minimise / prevent emissions (list techniques) <i>Where EQS considerations require measures stricter than BAT, highlight these measures in bold</i> | Type of Receiving Water ⁴ | Receiving Water Code <i>(or name where no code is available)</i> |
|----------------------------------|------------------------------|--------------------------------|---------------------------------|--------------------------|--|--|---|
| | | | | | assessment are included in waste licence review application. | eventually discharges to Durnesh Lough SAC 5km downstream of the proposed development. | |
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* add rows to the table as necessary

* indicates required field



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Waste Water to Surface Water - Emission Monitoring Points (See Note ii at end of this attachment)

Complete the table below for each emission point, by entering the Emission Point Code, the associated Monitoring Point Code and the grid reference of the Monitoring Point(s) *.

| Emission Point Code | Monitoring Point Code | Monitoring Point Grid Reference | |
|---------------------|-----------------------|---------------------------------|-----------------------|
| | | Easting ⁵ | Northing ⁶ |
| D1 | D1 | 193128 | 367882 |
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* add rows to the table as necessary

Note: Map(s)/drawing(s) uploaded under 'Site Plans' in Tab 3 of the application form should identify the emission and monitoring points.

⁵ Six Digit GPS Irish National Grid Reference

⁶ Six Digit GPS Irish National Grid Reference

* indicates required field



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Waste Water to Surface Water – Emissions (See Note iii at the end of this attachment)

Complete the table below for each emission point (include one row for each identified parameter) *

| Emission Point Code | Parameter | Monitoring Point Code | Proposed Emission Limits | | | | How was the Emission Limit Derived? | BAT Associated Emission Range (if applicable) | Sampling / Monitoring | | |
|---------------------|----------------------|-----------------------|--------------------------|-----------|---------------|----------------|--|---|-------------------------------|---------------|-------------------------------|
| | | | Max Hourly | Max Daily | Average Month | Average Annual | | | Proposed Monitoring Frequency | Sample Method | Analysis Method and Technique |
| D1 | pH | D1 | | 6-8 | | | Assimilative capacity assessments and mass balance calculations have been calculated to measure the receiving water body's ability to assimilate the residual pollutants in the treated effluent discharged. | N/A | Weekly | Grab Sample | |
| | BOD | | | <10mg/l | | | | | | | |
| | COD | | | <50mg/l | | | | | | | |
| | Suspended Solids | | | <15mg/l | | | | | | | |
| | Orthophosphate | | | <0.1mg/l | | | | | | | |
| | Total Ammonia (as N) | | | <2mg/l | | | | | | | |
| | Cadmium | | | <0.5µg/l | | | | | | | |
| | Chromium | | | <1µg/l | | | | | | | |
| | Copper | | | <5µg/l | | | | | | | |
| | Lead | | | <1µg/l | | | | | | | |
| | Mercury | | | <0.5µg/l | | | | | | | |
| | Nickel | | | <20µg/l | | | | | | | |
| | Zinc | | | <50µg/l | | | | | | | |

* add rows to the table as necessary

* indicates required field

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Note i Complete the following table for each emission point having regard to the guidance hereunder.
The following convention should be observed when labelling emission points: Surface water SW1, SW2, etc., A National Grid Reference (12 digit, 6E, 6N) must be given for each emission point.
Describing the source of the emission helps explain the nature of the emission such as process or contaminated run-off etc.
Measures are usually required to reduce, minimise or prevent emissions from occurring. They may involve the application of a single technique or a combination of techniques including process integrated, recovery, abatement and treatment techniques. List all techniques proposed/employed. Technique(s) employed must comply with BAT. Highlight additional measures required for the purposes of protecting the environment, i.e., EQS considerations. The measures or techniques to be taken must be capable of complying with the proposed/known emission level(s).
The measures required shall be informed by the following:

1. BAT techniques with BAT-AEL
2. BAT techniques without BAT-AEL
3. Stricter measures/techniques than BAT (due to EQS)
4. BAT determined by competent authority in consultation with the applicant
5. Measures to minimise pollution over long distances or in the territory of other states.
6. Emerging techniques
7. Less strict measures than BAT (due to derogation)
8. Other measures

Note ii An individual record (i.e., row) is required for each monitoring and sampling point. A National Grid Reference (12 digit, 6 Easting, 6 Northing) must be given for each monitoring point.

Note iii Complete the following table for each emission point having regard to the guidance hereunder.
Characterise the emissions (identify the parameters) under normal operation. The parameters also cover volumes and rates of emission. Those substances which are likely to be emitted in significant quantities, having regard to their potential to transfer pollution from one medium to another must be identified and the applicant must determine emission levels having considered the following:

To identify the chemical parameters:

1. substances listed in the Schedule of EPA (Industrial Emissions)(Licensing) Regulations 2013, S.I. No. 137 of 2013,
2. IED chapters III, IV, V VI where relevant
3. The fate of materials/substances, intermediates, products and by products used or produced through the process particularly substances of very high concern, substances carrying the Hazard statement H400 to 413 (hazardous to the aquatic environment) and hazardous substances with damaging effects on sensitive plants and ecosystems.
4. Any reaction substances likely to appear as a result of treatment or natural breakdown processes with damaging effects on sensitive plants and ecosystems.
5. any substances with the potential to cause odour nuisance off site.
6. List I and List II substances listed in the Annex to EU Directive 2006/11/EC (as amended).

To determine the emission levels:

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The applicant must consider the following:

1. Decision(s) on BAT conclusions /conclusions on Bat (BREF)/ EPA BAT guidance notes
2. Other BAT determined in consultation
3. Environmental quality standards and objectives
4. Measures or controls identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the EC Environmental Objectives (Surface Waters) Regulations 2009 for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.
5. If relevant, the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) as amended by the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004) or any further amendment thereof
The applicant is wholly responsible for a true and accurate description of the emission. Any person who gives to the Agency information which is false or misleading in a material respect is guilty of an offence.

The applicant must provide the basis upon which the emission level was determined. There are five categories as follows:

- a. Emission levels based on BAT
- b. Emission levels that are stricter than BAT due to the EQS
- c. Temporary Emissions levels associated with an emerging technique (less strict than BAT)
- d. Emission levels based on a derogation (less strict than BAT)
- e. Emission levels for other substances based on EQS

Monitoring requirements must be in line with any conclusion on monitoring as described in the decision on BAT conclusion/ BAT conclusion/ BAT guidance.