

EPA Application Form

7.4.1 - Emissions to Atmosphere - Main and Fugitive Emissions - Attachment

Organisation Name: * William Connolly & Sons Unlimited Company

Application I.D.: * P1069-01



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 2017 | Identification of required fields | Assist correct completion of attachment |
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EMISSIONS TO ATMOSPHERE

Emissions to air/atmosphere include the following:

Main Emissions

Main emissions include all emissions of environmental significance. Where a **mass emission threshold** is specified in a BAT document (BAT Conclusions, National BAT note or BREF), emissions which exceed this threshold prior to abatement are regarded as significant, i.e., 'main emissions'. (In some cases emissions below the threshold can still be significant and qualify as Main Emissions).

Minor Emissions

Emissions below the mass emission threshold <u>may</u> be considered minor emissions and therefore do not generally need to be specifically controlled by the conditions or schedules of the licence (i.e., setting of ELVs, abatement control measures, or monitoring requirements). Emissions may also be deemed minor by virtue of their source/nature (e.g., laboratory fume hoods, workspace extractions, passive vents from storage tanks, HVAC exhausts), or composition (e.g., water vapour emissions).

For combustion plant such as boilers, these can be considered minor where the rated thermal input is < 1MW where natural gas is the main fuel, and for liquid and solid fuels where its < 250kW.

In completing the separate 'Emissions to Atmosphere - Minor and Potential' attachment for minor emissions, the applicant should supply sufficient information to justify the determination of the emission as minor. Notwithstanding this guidance, the Agency may consider any emission to be significant (i.e., a main emission) on the basis of environmental impact.

Fugitive Emissions

Fugitive emissions include emissions from non-point sources and diffuse sources.

Potential Emissions

These are emissions which only operate under abnormal process conditions. Typical examples include bursting discs, pressure relief valves, and emergency generators. Bypasses and flares may also fall within this category, depending on how they are operated or designed to operate. Although the Agency does not normally set controls in licences for potential emissions, it may do so for the purposes of environmental protection.

This attachment collects information on <u>main</u> and <u>fugitive</u> emissions to atmosphere. Waste gas means the final gaseous emission from a stack or abatement equipment.

For minor and potential emissions to atmosphere, complete the separate 'Emissions to Atmosphere - Minor and Potential' attachment.



Main Emissions to Atmosphere - Waste Gas Emission Point Details - one row per emission point *

Complete the following table with summary details for all main emission points to atmosphere.

(Guidance on completing the table is included in Note i at the end of this attachment)

The applicant should address in particular any emissions which may contain the principal polluting substances listed in the First Schedule of Environmental Protection Agency (Integrated Pollution Control) (Licensing) Regulations 2013/ (Industrial Emissions)(Licensing) Regulations 2013.

Please note that the determination of any emission limit values and monitoring requirements in a proposed licence if granted will be based on the information supplied hereunder.

The following Section indicates current emissions at the Site.

| Emission Point | | mission Point Grid Ref. Typical Days | | Measures to reduce /minimise / prevent emissions (list techniques) ¹ | | Minimum Discharge | | Reference | Conditions | |
|----------------|--------------|--|----------------------|--|------------------------------------|-------------------------------|----------------|---------------------------|------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| BOILERS | | | | | | | | | | |
| A1-1 | 268010 | 154241 | 365 days | None | Duty Boiler | 18 | 101.325k Pa | 273.15K | 3% | dry |

¹ Detailed descriptions and schematics of all abatement systems should be included in the Operational Report (Tab 4.8 – 'Reports').

² **Options:** Boiler, Gas Turbine, Incineration, Co-Incineration, CHP, Kiln, Engine, Indirect drying activity (e.g. milk drying), Other Combustion activity (e.g., oven), Distillation/Chemical reaction, Solvent based coating activity, Other coating activity (provide description), Composting Tunnels, General extraction from buildings <u>or</u> Other (provide a description if '**Other**' is selected).

³ Six Digit GPS Irish National Grid Reference.

⁴ Six Digit GPS Irish National Grid Reference.

⁵ **Options:** 101.325kPa <u>or</u> No correction.

⁶ **Options:** 273.15K or No correction.

⁷ **Options:** 3%, 6%, 10%, 11%, 15%, 18% <u>or</u> No correction.

⁸ **Options:** Wet **or** Dry.



| Emission Point | | Point Grid | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) ¹ | | Minimum Discharge | | Reference | Conditions | |
|----------------|-----------|---------------|----------------------|--|------------------------------------|-------------------------------|----------------|---------------------------|----------------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| A1-2 | 268009 | 154242 | 6 hours a week | none | Stand-by Boiler | 18 | 101.325k Pa | 273.15K | 3% | dry |
| FEED MILL | | | | | | | | | | |
| A2-1 | 268040 | 154205 | 12 months | Cyclone | Cuber 1 | 21 | 101.325k Pa | 273.15K | 3% | dry |
| A2-2 | 268038 | 154203 | 12 months | Cyclone | Cuber 2 | 21 | 101.325k Pa | 273.15K | 3% | dry |
| A2-3 | 268035 | 154164 | 12 months | Cyclone | Cuber 3 | 21 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-4 | 268041 | 154208 | 12 months | Cyclone | Cuber 4 | 19 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-6 | 268001 | 154208 | 12months | Cyclone and Fabric Filter | Flaker 1 | 29 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-7 | 268000 | 154208 | 12months | Cyclone and Fabric Filter | Flaker 1 | 29 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-8 | 268006 | 154206 | 12months | Cyclone and Fabric Filter | Flaker 2 | 23.5 | 101.325k Pa | 273.15K | No correctio n | Wet |



| Emission Point | | Point Grid Ref. | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) ¹ | | Minimum Discharge | | Reference | Conditions | |
|----------------|-----------|--------------------|----------------------|--|------------------------------------|-------------------------------|----------------|---------------------------|----------------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| A2-9 | 267998 | 154206 | 12months | Cyclone and Fabric Filter | Flaker 2 | 30 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-10 | 268005 | 154207 | 12months | Cyclone | Flaker Cyclone | 20 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-11 | 268010 | 154209 | 12months | Cyclone | Flaker Dryer | 32 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-12 | 268007 | 154224 | 12months | Cyclone | Cyclone GVRSA and GVRSB | 25 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-13 | 268002 | 154226 | 12months | None | Flaker Cleaner | 23 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-15 | 267993 | 154239 | 12months | Cyclone | Soya Grinder | 3 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-16 | 268003 | 154221 | 12months | Cyclone | Soya Extruder | 24 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-17 | 267985 | 154209 | 12months | Cyclone | Soya Cyclone - Bin Filling | 30.5 | 101.325k Pa | 273.15K | No correctio n | Wet |



| Emission Point | | Point Grid Ref. | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) ¹ | | Minimum Discharge | | Reference | Conditions | |
|----------------|-----------|--------------------|----------------------|--|------------------------------------|-------------------------------|----------------|---------------------------|----------------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| A2-18 | 268008 | 154203 | 12months | Fabric Filter | Grinder 1 | 3 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-19 | 268007 | 154205 | 12months | Fabric Filter | Grinder 3 | 3 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-20 | 268006 | 154203 | 12months | Fabric Filter | Grinder 4 | 3 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-21 | 268025 | 154164 | 12months | Fabric Filter | Main Intake Grain | 15.9 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-22 | 268002 | 154209 | 12months | Cyclone | Extruder Vent | 13.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-23 | 268002 | 154238 | 12months | None | Extruder Dryer/ Cooler Vent | 23 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-26 | 268009 | 154204 | 12months | Cyclone | Flaker Cleaner | 23 | 101.325k Pa | 273.15K | No correctio n | Wet |
| | | | | | | | | | | |



| Emission Point | | Ref. Typical prevent emissions (list techniques) ¹ Disch | | Minimum Discharge | | Reference | Conditions | | | |
|----------------|-----------|---|----------------------|--|------------------------------------|-------------------------------|-------------------|---------------------------|----------------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| DRYERS | | | | | | | | | | |
| A2-30A | 267972 | 154247 | 2 months | None | Dryer 2 | 8 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-30B | 267972 | 154246 | 2 months | None | Dryer 2 | 8 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-31 | 268019 | 154252 | 2 months | Cyclone | Dryer 2 – pre-cleaner | 9 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-32 | 268028 | 154447 | 2 months | Cyclone | Dryer 5 – pre-cleaner | 13 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-33 | 268042 | 154460 | 2 months | Cyclone | Dryer 5 | 21.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-34 | 268040 | 154461 | 2 months | Cyclone | Dryer 5 | 21.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-35 | 268038 | 154459 | 2 months | Cyclone | Dryer 5 | 21.5 | 101.325k Pa | 273.15K | No correctio n | Wet |



| Emission Point | | Point Grid | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) ¹ | | Minimum Discharge | | Reference | Conditions | |
|----------------|-----------|---------------|----------------------|--|------------------------------------|-------------------------------|----------------|---------------------------|----------------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| A2-36 | 268038 | 154462 | 2 months | Cyclone | Dryer 5 | 21.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-37 | 268037 | 154463 | 2 months | Cyclone | Dryer 5 | 21.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-38 | 268022 | 154417 | 2 months | Cyclo-dust separator | Dryer 4A2 | 11 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-39 | 268030 | 154418 | 2 months | Cyclo-dust separator | Dryer 4A1 | 11 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-40 | 268005 | 154443 | 2 months | Cyclone | Dryer 4A/B - pre-cleaner | 10.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-41 | 268013 | 154424 | 2 months | Cyclo-dust separator | Dryer 4B | 19.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-42 | 268016 | 154422 | 2 months | Cyclo-dust separator | Dryer 4B | 19.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-45A | 268045 | 154531 | 2 months | none | Replacement Dryer 6 | 24.5 | 101.325k Pa | 273.15K | No correctio n | Wet |



| Emission Point | | Point Grid Ref. | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) ¹ | | Minimum Discharge | | Reference | Conditions | |
|----------------|-----------|--------------------|----------------------|--|------------------------------------|-------------------------------|----------------|---------------------------|----------------------|---------------|
| Code | Easting 3 | Northing 4 | Usage/Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ² | Height Above Ground (m) | Pressure 5 | Temp. (K) ⁶ | % Oxygen | Moisture 8 |
| A2-45B | 268047 | 154535 | 2 months | none | Replacement Dryer 6 | 24.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-46A | 268049 | 154539 | 2 months | none | Replacement Dryer 6 | 24.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-46B | 268051 | 154543 | 2 months | none | Replacement Dryer 6 | 24.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-46C | 268042 | 154549 | 2 months | Fabric Filter | Replacement Dryer 6 | 20 | 101.325k Pa | 273.15K | No correctio n | Wet |
| SEED PLANT | | | | | | | | | | |
| A2-48 | 268022 | 154392 | 2 months | Cyclone | Seed Plant | 12 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-49 | 268019 | 154292 | 2 months | Cyclone | Seed Plant | 12 | 101.325k Pa | 273.15K | No correctio n | Wet |

Note 1: Except for Dryers, all other emission points operate throughout the year; however not continuously, or in a pattern, therefore must be licensed to operate year-round. Detailed information on operating hours and typical vs. average operating regime for Dryers, Feed Mill and Seed Plant is provided in RFI response submitted on 7th January 2022 and in Air Dispersion Modelling Report.



THE FOLLOWING SECTION INDICATES CHAGES AFTER MITIGATION MEASURES

No changes to Dryers and Seed Plant currently proposed. Changes are indicated in red in table below. For emission points not listed, no changes proposed.

| Emission Point | | Emission Point Grid Ref. | | Measures to reduce /minimise / prevent emissions (list techniques) ⁹ | ues) ⁹ | Minimum Discharge | Reference Conditions | | | | |
|----------------|---------|-----------------------------|--------------------------|--|-------------------------------------|-------------------------------|----------------------|----------------------------|----------------------|----------------|--|
| Code | Easting | Northing 12 | Usage/ Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ¹⁰ | Height Above Ground (m) | Pressure | Temp. (K) ¹⁴ | % Oxygen | Moisture 16 | |
| FEED MILL | | | | | | | | | | | |
| A2-1 | 268040 | 154208 | 12 months | Cyclone Cuber 1 27 101.325k Pa 273. | Cuber 1 27 | 273.15K | K 3% | dry | | | |
| A2-2 | 268028 | 154207 | 12 months | Cyclone | Cuber 2 | 27 | 101.325k Pa | 273.15K | 3% | dry | |
| A2-3 | 268035 | 154206 | 12 months | Cyclone | Cuber 3 | 27 | 101.325k Pa | 273.15K | No correctio n | Wet | |

⁹ Detailed descriptions and schematics of all abatement systems should be included in the Operational Report (Tab 4.8 – 'Reports').

Detions: Boiler, Gas Turbine, Incineration, Co-Incineration, CHP, Kiln, Engine, Indirect drying activity (e.g. milk drying), Other Combustion activity (e.g., oven), Distillation/Chemical reaction, Solvent based coating activity, Other coating activity (provide description), Composting Tunnels, General extraction from buildings or Other (provide a description if 'Other' is selected).

¹¹ Six Digit GPS Irish National Grid Reference.

¹² Six Digit GPS Irish National Grid Reference.

Options: 101.325kPa <u>or</u> No correction.

Options: 273.15K or No correction.

¹⁵ **Options:** 3%, 6%, 10%, 11%, 15%, 18% <u>or</u> No correction.

Options: Wet <u>or</u> Dry.



| Fmi | ssion Point | | Point Grid Ref. | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) 9 | | Minimum Discharge | | Reference | Conditions | |
|-------|--|---------------|--------------------|--------------------------|--|-------------------------------------|-------------------------------|----------------|----------------------------|----------------------|----------------|
| | Code | Easting 11 | Northing 12 | Usage/ Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ¹⁰ | Height Above Ground (m) | Pressure | Temp. (K) ¹⁴ | % Oxygen | Moisture 16 |
| A2-4 | | 268041 | 154221 | 12 months | Cyclone | Cuber 4 | 29 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-6 | | | | 12 months | Fabric Filter | Flaker 1 | | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-7 | A2-6A | | | 12 months | Fabric Filter | Flaker 1 | | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-8 | All waste gases routed into one | 267005 | 45.4300 | 12 months | Fabric Filter | Flaker 2 | - | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-9 | emission point. Each of these will have own | 267995 | 154208 | 12 months | Fabric Filter | Flaker 2 | 34 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-13 | filter and fan, prior to merging | | | 12 months | Fabric Filter | Flaker Cleaner | | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-26 | | | | 12 months | Fabric Filter | Flaker Cleaner | | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-18 | A2-18A | 268003 | 154212 | 12mont hs | Fabric Filter | Grinder 1 | 34 | 101.325k Pa | 273.15K | No correctio n | Wet |



| Emi | ssion Point | | Point Grid Ref. | Typical Days | Measures to reduce /minimise / prevent emissions (list techniques) 9 | | Minimum Discharge | | Reference | Conditions | |
|-------|--|--------------|--------------------|--------------------------|--|-------------------------------------|-------------------------------|----------------|----------------------------|----------------------|----------------|
| | Code | Easting 11 | Northing 12 | Usage/ Year Note 1 | Where EQS considerations require measures stricter than BAT, highlight these measures in bold | Source of Waste Gases ¹⁰ | Height Above Ground (m) | Pressure | Temp. (K) ¹⁴ | % Oxygen | Moisture 16 |
| A2-19 | All waste gases routed into one | | | 12mont hs | Fabric Filter | Grinder 3 | | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-20 | emission point. Each of these will have own filter and fan, prior to merging | | | 12mont hs | Fabric Filter | Grinder 4 | | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-10 | | 268004 | 154209 | 12mont hs | Fabric Filter | Flaker Cyclone | 25.5 | 101.325k Pa | 273.15K | No correctio n | Wet |
| A2-21 | | 268025. 5 | 154164 | 12mont hs | Fabric Filter | Main Intake Grain | 32 | 101.325k Pa | 273.15K | No correctio n | Wet |



Emission Points from Combustion, Incineration or Co-incineration Sources Only

Complete the table below for each emission point to atmosphere from a combustion source, waste incineration or co-incineration plant

| Emission Point Code | Primary Fuel Type ¹⁷ (where applicable) | Secondary Fuel Type ¹⁸ (where applicable) | LCP Plant Reference (where applicable) | Waste incineration or co- incineration plant reference (where applicable) |
|---------------------|---|--|---|--|
| A1-1 | LPG | None | n/a | n/a |
| A1-2 | LPG | None | n/a | n/a |
| | | | | |
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^{*}add rows to the table as necessary

¹⁷ **Options:** Coal, Lignite, Heavy Fuel Oil, Other Fuel Oil, Peat, Natural Gas, Biogas, Solid Biomass, Waste, Gas Oil, Other or None

¹⁸ **Options:** Coal, Lignite, Heavy Fuel Oil, Other Fuel Oil, Peat, Natural Gas, Biogas, Solid Biomass, Waste, Gas Oil, Other <u>or</u> None



Emission Points with Solvent Emissions Only

Complete the table below for each emission point associated with a solvent activity

| Emission Point Code | Are specific Hazardous Substances ¹⁹ Emitted? | Mass Flow of Emitted Hazardous Substances (g/hour) | Halogenated VOCs ²⁰ Emitted? | Mass Flow of Emitted Halogenated VOCs (g/hour) |
|------------------------|---|--|---|--|
| n/a | | | | |
| | | | | |
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^{*}add rows to the table as necessary

Emissions of volatile organic compounds referred to in Article 58 (Substances or mixtures which, because of their content of volatile organic compounds classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No. 1272/2008, are assigned or need to carry the hazard statements H340, H350,H350i, H360D or H360F) of the Industrial Emissions Directive.

Halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351.



Waste Gas Emission Monitoring Points

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. *

| Emission Point Code | Monitoring Point Code 21 | Monitoring Point | Grid Reference | | |
|--|---|---|------------------------|--|--|
| Emission Point Code | Monitoring Point Code ²¹ | Easting ²² | Northing ²³ | | |
| All emission points are the same as in main emission points table above. | All monitoring points codes are the same as Emission Point Codes. | All co-ordinates are the same as for the emission points, listed in the ta above. | | | |
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| | | | | | |

^{*}add rows to the table as necessary

²¹ To include monitoring and sampling points

²² Six Digit GPS Irish National Grid Reference

²³ Six Digit GPS Irish National Grid Reference



Waste Gas - Abatement /Treatment Control

Complete the table below for each emission point with an abatement/treatment system (one table per emission point)

Emission Point Code: All points

| Control ²⁴ parameter | Monitoring to be carried out ²⁵ | Additional notes (where relevant) |
|---------------------------------|--|--|
| Air flow | Flow meter/ pitot tube | For all emission points that have cyclone |
| Differential pressure | Differential pressure | For all emission points that have fabric filters |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

^{*}add rows to the table as necessary

 $^{^{24}}$ List the operating parameters of the treatment/abatement system which control its function. 25 List the monitoring of the control parameter to be carried out.



Waste Gas Emissions

Complete the table below for all main emission points to atmosphere (include one row for each identified parameter) *

The following Section indicates current emissions at the Site.

| Emission | | Parameter Monitoring Point Code Max. Hourly 27 Proposed Emission Limits 2 Average Average Annual 29 Annual 30 | | Prop | osed Emiss | sion Limits | 26 | BAT Associated | EPA Guidance | Sampling / Monitoring for Monitoring - AG2 Index of Preferred Methods | |
|---------------|-----------|--|---|---|-------------------------------------|---|--|--|--------------|--|-----|
| Point Code | Parameter | | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³¹ | Compliant with BAT Monitoring Requirement? | | | | |
| Boilers | | | | | | | | | | | |
| A1-1 | NOx | A1-1 | 200mg/ Nm3 | n/a | n/a | n/a | Monitoring and MCPD | Medium Combustion Plant Directive | Annual | Flue Gas Analyser | Yes |
| A1-1 | SO2 | A1-1 | 35mg/N m3 | n/a | n/a | n/a | MCPD | Medium Combustion Plant Directive | Annual | Flue Gas Analyser | Yes |
| | | | | | | | | | | | |

For emissions outside the BAT Conclusion, BREF or BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring emissions within the limits set out in the BAT Conclusion(s), BREF(s) or BAT guidance note(s). These notes can be found on the EPA website at www.epa.ie.

²⁷ Specify the proposed limit **and** the units.

²⁸ Specify the proposed limit **and** the units.

²⁹ Specify the proposed limit **and** the units.

 $^{^{\}rm 30}$ Specify the proposed limit <u>and</u> the units.

³¹ For continuous monitoring 'EN15267 approved CEMS' is the standard method. For periodic monitoring please refer to the EPA guidance document 'AG2 Index of Preferred Methods'.



| Emission | | Monitoring | | Prop | osed Emiss | sion Limits | 26 | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|---------------|-----------------|-----------------------|-----------------|---------------|------------------|-------------------|---|--|---|---|--|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly | Max. Daily | Average Month | Average Annual | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³¹ | Compliant with BAT Monitoring Requirement? | |
| A1-1 | Volumetric Flow | A1-1 | 5,000 Nm3/hr | n/a | n/a | n/a | Calculation | n/a | Annual | Analyser | Yes | |
| A1-2 | NOx | A1-2 | 200mg/ Nm3 | n/a | n/a | n/a | Monitoring and MCPD | Medium Combustion Plant Directive | Annual | Flue Gas Analyser | Yes | |
| A1-2 | SO2 | A1-2 | 35mg/N m3 | n/a | n/a | n/a | MCPD | Medium Combustion Plant Directive | Annual | Flue Gas Analyser | Yes | |
| A1-2 | Volumetric Flow | A1-2 | 3,000 Nm3/hr | n/a | n/a | n/a | Calculation | n/a | Annual | Analyser | Yes | |



| Emission | | | P | roposed | Emissio | on Limits | 32 | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|---------------|-----------------------|--------------------------|---------------------------|---------------|--|---|---|---|---|---|--|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua I ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? | |
| Fee | ed Mill – Total Parti | culates | | | | | | | | | | |
| A2-1 | Total Particulates | A2-1 | 0.260 kg/hr | n/a | n/a | n/a | Monitoring & modelling | <2-20 | Annual | EN 13284-1 | Yes | |
| A2-2 | Total Particulates | A2-2 | 0.240 kg/hr | n/a | n/a | n/a | Monitoring & modelling | <2-20 | Annual | EN 13284-1 | Yes | |
| A2-3 | Total Particulates | A2-3 | 0.280 kg/hr | n/a | n/a | n/a | Monitoring & modelling | <2-20 | Annual | EN 13284-1 | Yes | |
| A2-4 | Total Particulates | A2-4 | 0.280 kg/hr | n/a | n/a | n/a | Based on Cubers 1 – 3 | <2-20 | Annual | EN 13284-1 | Yes | |
| A2-6 | Total Particulates | A2-6 | 0.080 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |

For emissions outside the BAT Conclusion, BREF or BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring emissions within the limits set out in the BAT Conclusion(s), BREF(s) or BAT guidance note(s). These notes can be found on the EPA website at www.epa.ie.

³³ Specify the proposed limit **and** the units.

³⁴ Specify the proposed limit <u>and the units.</u>

³⁵ Specify the proposed limit **and** the units.

³⁶ Specify the proposed limit **and** the units.

³⁷ For continuous monitoring 'EN15267 approved CEMS' is the standard method. For periodic monitoring please refer to the EPA guidance document 'AG2 Index of Preferred Methods'.



| Emission | | | P | roposed | Emissio | on Limits | 32 | BAT Associated | EPA Guidance | Sampling / Monito | _ |
|---------------|-----------------------|--------------------------|---------------------------|---------------|--|---|---|---|-------------------------------------|---|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua I ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? |
| A2-7 | Total Particulates | A2-7 | 0.100 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-8 | Total Particulates | A2-8 | 0.060 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-9 | Total Particulates | A2-9 | 0.030 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-10 | Total Particulates | A2-10 | 0.150 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-11 | Total Particulates | A2-11 | 0.050 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-12 | Total Particulates | A2-12 | 0.260 kg/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 13284-1 | Yes |
| A2-13 | Total Particulates | A2-13 | 0.110 kg/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 13284-1 | Yes |
| A2-15 | Total Particulates | A2-15 | 0.050 kg/hr | n/a | n/a | n/a | Monitoring & modelling | <2-10 | Annual | EN 13284-1 | Yes |
| A2-16 | Total Particulates | A2-16 | 0.040 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-17 | Total Particulates | A2-17 | 0.030 kg/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 13284-1 | Yes |
| A2-18 | Total Particulates | A2-18 | 0.035 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes |
| A2-19 | Total Particulates | A2-19 | 0.033 kg/hr | n/a | n/a | n/a | Based on A-17 ad A-18 | <2-10 | Annual | EN 13284-1 | Yes |



| Emission | | | P | roposed | Emissio | on Limits | 32 | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|---------------|-----------------------|--------------------------|---------------------------|---------------|--|---|---|---|---|---|--|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua I ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? | |
| A2-20 | Total Particulates | A2-20 | 0.040 kg/hr | n/a | n/a | n/a | Monitoring & modelling | <2-10 | Annual | EN 13284-1 | Yes | |
| A2-21 | Total Particulates | A2-21 | 0.033 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-22 | Total Particulates | A2-22 | 0.070 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-23 | Total Particulates | A2-23 | 0.140 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-26 | Total Particulates | A2-26 | 0.030 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| Dı | ryers – total Partici | ulates | | | | | | | | | | |
| A2-30A | Total Particulates | A2-30A | 0.295 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-30B | Total Particulates | A2-30B | 0.295 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-31 | Total Particulates | A2-31 | 0.020 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-32 | Total Particulates | A2-32 | 0.100 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-33 | Total Particulates | A2-33 | 0.210 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-34 | Total Particulates | A2-34 | 0.195 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-35 | Total Particulates | A2-35 | 0.160 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |



| Emission | | | P | roposed | Emissio | on Limits | 32 | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|---------------|-----------------------|--------------------------|---------------------------|---------------|--|---|---|---|---|---|--|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua I ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? | |
| A2-36 | Total Particulates | A2-36 | 0.195 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-37 | Total Particulates | A2-37 | 0.195 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-38 | Total Particulates | A2-38 | 0.265 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-39 | Total Particulates | A2-39 | 0.415 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-40 | Total Particulates | A2-40 | 0.100 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-41 | Total Particulates | A2-41 | 0.295 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-42 | Total Particulates | A2-42 | 0.390 kg/hr | n/a | n/a | n/a | Monitoring & modelling | n/a | Annual | EN 13284-1 | Yes | |
| A2-45A | Total Particulates | A2-45A | 1.360 kg/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 13284-1 | Yes | |
| A2-45B | Total Particulates | A2-45B | 1.360 kg/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 13284-1 | Yes | |
| A2-46A | Total Particulates | A2-46A | 1.360 kg/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 13284-1 | Yes | |
| A2-46B | Total Particulates | A2-46B | 1.360 kg/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 13284-1 | Yes | |
| A2-46C | Total Particulates | A2-46C | 0.200 kg/hr | n/a | n/a | n/a | Calculation | n/a | Annual | EN 13284-1 | Yes | |



| Fusiasion | | | P | roposed | Emissio | on Limits | 32 | BAT Associated | EPA Guidance | Sampling / Monito | J |
|---------------------------|-----------------------|--------------------------|---------------------------|---------------|--|---|---|---|-------------------------------------|---|--|
| Emission Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua I ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? |
| Seed | l Plant – Total Parti | culates | | | | | | | | | |
| A2-48 | Total Particulates | A2-48 | 0.200 kg/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 13284-1 | Yes |
| A2-49 | Total Particulates | A2-49 | 0.100 kg/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 13284-1 | Yes |
| Feed Mill | – Volumetric Flow | | | | | | | | | | |
| A2-1 | Volumetric Flow | A2-1 | 26,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-2 | Volumetric Flow | A2-2 | 24,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-3 | Volumetric Flow | A2-3 | 28,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-4 | Volumetric Flow | A2-4 | 28,000 Nm3/hr | n/a | n/a | n/a | Based on Cubers 1 – 3 | n/a | Annual | EN 16911-1 | Yes |
| A2-6 | Volumetric Flow | A2-6 | 8,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-7 | Volumetric Flow | A2-7 | 10,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-8 | Volumetric Flow | A2-8 | 12,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-9 | Volumetric Flow | A2-9 | 3,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-10 | Volumetric Flow | A2-10 | 30,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-11 | Volumetric Flow | A2-11 | 10,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-12 | Volumetric Flow | A2-12 | 26,000 Nm3/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 16911-1 | Yes |
| A2-13 | Volumetric Flow | A2-13 | 11,000 Nm3/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 16911-1 | Yes |
| A2-15 | Volumetric Flow | A2-15 | 5,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |
| A2-16 | Volumetric Flow | A2-16 | 8,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes |



| Emission | | | Pı | roposed | Emissic | on Limits | 32 | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|---------------|-----------------|--------------------------|---------------------------|---------------|--|---|---|---|---|---|--|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua l ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? | |
| A2-17 | Volumetric Flow | A2-17 | 3,000 Nm3/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 16911-1 | Yes | |
| A2-18 | Volumetric Flow | A2-18 | 7,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-19 | Volumetric Flow | A2-19 | 6,500 Nm3/hr | n/a | n/a | n/a | Based on A-17 ad A-18 | n/a | Annual | EN 16911-1 | Yes | |
| A2-20 | Volumetric Flow | A2-20 | 8,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-21 | Volumetric Flow | A2-21 | 6,500 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-22 | Volumetric Flow | A2-22 | 14,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-23 | Volumetric Flow | A2-23 | 28,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-26 | Volumetric Flow | A2-26 | 6,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| DRYERS - | Volumetric Flow | | | | | | | | | | | |
| A2-30A | Volumetric Flow | A2-30A | 59,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-30B | Volumetric Flow | A2-30B | 59,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-31 | Volumetric Flow | A2-31 | 2,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-32 | Volumetric Flow | A2-32 | 10,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-33 | Volumetric Flow | A2-33 | 42,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-34 | Volumetric Flow | A2-34 | 39,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-35 | Volumetric Flow | A2-35 | 32,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-36 | Volumetric Flow | A2-36 | 39,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-37 | Volumetric Flow | A2-37 | 39,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-38 | Volumetric Flow | A2-38 | 53,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-39 | Volumetric Flow | A2-39 | 83,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-40 | Volumetric Flow | A2-40 | 10,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |



| Emission | Barramatar | | P | roposed | Emissio | on Limits | 32 | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|---------------|---------------------------|--------------------------|---------------------------|---------------|--|---|---|---|---|---|--|--|
| Point Code | Parameter | Monitoring Point Code | Max. Hourly ³³ | Max. Daily | Aver age Mon th ³⁵ | Avera ge Annua I ³⁶ | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ³⁷ | Compliant with BAT Monitoring Requirement? | |
| A2-41 | Volumetric Flow | A2-41 | 59,000 Nm3/hr | n/a | n/a | n/a | Monitoring | n/a | Annual | EN 16911-1 | Yes | |
| A2-42 | Volumetric Flow | A2-42 | 78,000 Nm3/hr | n/a | n/a | n/a | Manufacturer specification | n/a | Annual | EN 16911-1 | Yes | |
| A2-45A | Volumetric Flow | A2-45A | 136,000 Nm3/hr | n/a | n/a | n/a | Manufacturer specification | n/a | Annual | EN 16911-1 | Yes | |
| A2-45B | Volumetric Flow | A2-45B | 136,000 Nm3/hr | n/a | n/a | n/a | Manufacturer specification | n/a | Annual | EN 16911-1 | Yes | |
| A2-46A | Volumetric Flow | A2-46A | 136,000 Nm3/hr | n/a | n/a | n/a | Manufacturer specification | n/a | Annual | EN 16911-1 | Yes | |
| A2-46B | Volumetric Flow | A2-46B | 136,000 Nm3/hr | n/a | n/a | n/a | Manufacturer specification | n/a | Annual | EN 16911-1 | Yes | |
| A2-46C | Volumetric Flow | A2-46C | 20,000 Nm3/hr | n/a | n/a | n/a | Manufacturer specification | n/a | Annual | EN 16911-1 | Yes | |
| SEEI | D PLANT - Volumeti | ric Flow | | | | | | | | | | |
| A2-48 | Volumetric Flow | A2-48 | 20,000 Nm3/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 16911-1 | Yes | |
| A2-49 | Volumetric Flow | A2-49 | 10,000 Nm3/hr | n/a | n/a | n/a | Estimate | n/a | Annual | EN 16911-1 | Yes | |

^{*} For continuous monitoring 'EN15267 approved CEMS' is the standard method. For periodic monitoring please refer to the EPA guidance document 'AG2 Index of Preferred Methods' linked above

THE FOLLOWING SECTION INDICATES CHAGES AFTER MITIGATION MEASURES

No changes to Dryers and Seed Plant currently proposed. Changes are indicated in red in table below. For emission points not listed, no changes to vol. flow or mass emissions are proposed.

^{*}add rows to the table as necessary



| Emission Point Code | | | Monitoring Point Code | Proposed Emission Limits ³⁸ | | | | | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | | |
|--------------------------------|------------|------------------|--------------------------|--|---------------|--|---|---|---|---|---|--|--|
| | | Paramete r | | Max. Hourly ³⁹ | Max. Daily | Aver age Mon th ⁴¹ | Avera ge Annua I ⁴² | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ⁴³ | Compliant with BAT Monitoring Requirement? | |
| Feed Mill – Total Particulates | | | | | | | | | | | | | |
| A2-6 | | | t A2-6A | 0.250 kg/hr | n/a | n/a | n/a | Calculation | n/a | Annual | EN 13284-1 | Yes | |
| A2-7 | | Total | | | n/a | n/a | n/a | | n/a | | | | |
| A2-8 | A2-6A | Particulat | | | n/a | n/a | n/a | | n/a | | | | |
| A2-9 | AZ-OA | es | | | n/a | n/a | n/a | | n/a | | | | |
| A2-13 | | | | | n/a | n/a | n/a | | n/a | | | | |
| A2-26 | | | | | n/a | n/a | n/a | | n/a | | | | |
| A2-18 | | Total | A2-18A | 0.150 kg/hr | n/a | n/a | n/a | Calculation | | <2-10 Annual | EN 13284-1 | Yes | |
| A2-19 | A2- 18A | Particulat es | | | n/a | n/a | n/a | | <2-10 | | | | |
| A2-20 | 10A | C 3 | | | n/a | n/a | n/a | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

For emissions outside the BAT Conclusion, BREF or BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring emissions within the limits set out in the BAT Conclusion(s), BREF(s) or BAT guidance note(s). These notes can be found on the EPA website at www.epa.ie.

³⁹ Specify the proposed limit **and** the units.

⁴⁰ Specify the proposed limit **and** the units.

⁴¹ Specify the proposed limit **and** the units.

⁴² Specify the proposed limit **and** the units.

⁴³ For continuous monitoring 'EN15267 approved CEMS' is the standard method. For periodic monitoring please refer to the EPA guidance document <u>'AG2 Index of Preferred Methods'</u>.



| Emission Point Code | | Paramete r | Monitoring Point Code | Proposed Emission Limits ³⁸ | | | | | BAT Associated | Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods | | |
|--------------------------|--------|---------------------|--------------------------|--|---------------|--|---|---|---|---|---|--|
| | | | | Max. Hourly ³⁹ | Max. Daily | Aver age Mon th ⁴¹ | Avera ge Annua I ⁴² | How was the Proposed Emission Limit Derived? | Emission Range (if applicable) | Proposed Monitoring Frequency | Proposed Monitoring and Analysis Method ⁴³ | Compliant with BAT Monitoring Requirement? |
| Feed Mill – Volumetric F | | netric Flow | | | | | | | | | | |
| A2-6 | | | | 50,000 Nm3/hr | n/a | n/a | n/a | Calculation | n/a | Annual | EN 16911-1 | Yes |
| A2-7 | | | | | n/a | n/a | n/a | | n/a | | | |
| A2-8 | A2-6A | Volumetri c Flow | A2-6A | | n/a | n/a | n/a | | n/a | | | |
| A2-9 | AZ-bA | CFIOW | | | n/a | n/a | n/a | | n/a | | | |
| A2-13 | | | | | n/a | n/a | n/a | | n/a | | | |
| A2-26 | | | | | n/a | n/a | n/a | | n/a | | | |
| | | | | | | | | | | | | |
| A2-18 | | Volumetri | i A2-18A | 30,000 Nm3/hr | n/a | n/a | n/a | Calculation | n/a | Annual | EN 16911-1 | Yes |
| A2-19 | A2-18A | c Flow | | | n/a | n/a | n/a | | n/a | | | |
| A2-20 | | | | | n/a | n/a | n/a | | n/a | | | |



Minor and/or Potential Emissions to Atmosphere 44

| Are there any minor <u>or</u> potential emission point(s) to atmosphere at the installation/facility? | Yes | |
|---|-----|--|
| (Yes/No) * | | |
| | | |
| | | |

If 'Yes' complete and upload the *Emissions to Atmosphere – Minor and Potential Emissions* template with details of minor and potential emissions (select Document Type: 'Minor - Potential Emissions' in the application form)

Emissions to Atmosphere - Minor - Potential Emissions file name:

Previously submitted with the IE application: "18 03 16 EPA Application Emissions to Air- Minor and Potential Section 7.2.pdf"

Refer to page 3 for guidance on what constitutes a minor or potential emission.



Fugitive Emission to Atmosphere

Fugitive emissions must be controlled by way of appropriate controls and techniques to minimise emissions. (Additional information on fugitive emission is included in Note ii at the end of this attachment)

Are there any sources of fugitive emissions at the installation/facility?⁴⁵ (Yes/No) * Yes

If 'Yes' provide summary details of the fugitive emissions in the table below:

| Type of Fugitive Emission | Emission Type Applicable? (Yes/No) | Description of fugitive emissions source(s) | Maximum Level | Units | Descriptor/Location |
|---------------------------------|------------------------------------|--|-----------------------|-------------|---------------------------------|
| Dust | Yes | During harvest season, deliveries of grain, as well as stockpiles of grain in the yards and fields around the plant are key sources of fugitive emissions. | 350 | mg/m²/day | Dust deposition |
| VOC ⁴⁶ | No | n/a | n/a | % | of solvent input |
| Ammonia | No | n/a | n/a | ug/m³ | at the nearest European Site |
| Nitrogen | No | n/a | n/a | kgN/ha/yr | at the nearest European Site |
| Odour | Yes | Feed Mill sources, in particular Cubers, and any steam processes. | 3 OU _E /m3 | Odour Units | At sensitive receptors |

For waste activities, dust and odour emissions should be considered and described in the table below where applicable.

In relation to activities listed in Chapter V (for installations using Organic Solvents) of the Industrial Emissions Directive (2010/75/EU):

specify how the requirements in relation to fugitive emissions will be met.



Provide details of the techniques to be used to reduce / minimise / prevent fugitive emissions in text bow below

- Dust Management Plan will be prepared for the Site and implemented before the Harvest Season 2022.
- Although currently, odour is not an issue, and no complaints were ever received, Odour Management Plan will also be prepared within 1 year of IEL being issued.

Note

Complete the table for each emission point having regard to the guidance hereunder.

The following convention should be observed when labelling emission points:

Boiler Emissions A1-1, A1-2, A1-3,...etc. **Main Emissions** A2-1, A2-2, A2-3,...etc.

Minor Emissions
A3-1, A3-2, A3-3,...etc. (NOTE: Minor emission points are to be included in the 'Emissions to Atmosphere - Minor and Potential' attachment)
A4-1, A4-2, A4-3,...etc. (NOTE: Potential emission points are to be included in the 'Emissions to Atmosphere - Minor and Potential' attachment)

A National Grid Reference (12 digit, 6E, 6N) must be provided for each emission point.

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. AQS 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 AQS)
- 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

Select from the drop down list the source of the emission as it helps explain the nature of the emission.

Particular attention should be paid to ensuring that emissions data (volumetric flow and pollutant concentrations) are presented at the required reference conditions for oxygen, temperature, pressure and moisture.



Note ii Fugitive emissions include the following:

- Dust from area sources such as a quarry.
- Odour from volume sources such as a pig unit, waste water treatment plant, waste handling etc.
- VOCs from processes using solvent not captured in waste gases.
- Ammonia and nitrogen from pig and poultry units.

Processes that can give rise to fugitive emissions include:

- o Leaks from valve seals, pump seals and flanges;
- o Breathing and working losses from liquid storage facilities;
- o Dust emissions from solids stored in the open;
- o Loading and unloading operations;
- o Cleaning operations; and,
- o Emissions from waste water treatment (e.g. volatile organics).

The measures taken to reduce/ prevent fugitive emissions to atmosphere must be addressed, and the facilities and operations required to control emissions must be detailed.