

**Register No. – P1069-01**

**FURTHER INFORMATION SUBMISSION TO SUPPORT LICENCE APPLICATION (REG. No. P1069-01)**

**Submission By:** William Connolly & Sons Unlimited Company.  
Grange Lower,  
Goresbridge,  
Co. Kilkenny.


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**Submission To:** Environmental Protection Agency.  
Office of Climate Licensing & Resource Use,  
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## DOCUMENT CONTROL SHEET

<b>Applicant</b>	William Connolly & Sons Unlimited Company
<b>Project</b>	Further Information Submission
<b>Document Title</b>	Further Information Submission to Support Licence Application (Reg. No. P1069-01)

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## INTRODUCTION

William Connolly & Sons Unlimited (Red Mills), Grange Lower, Goresbridge, Co. Kilkenny submitted an application for an Industrial Emissions Licence (IED) to the Environmental Protection Agency (Agency). The Agency responded to the Red Mills application for an IED licence (Reg. P-1069) on November 20<sup>th</sup>, 2018 requesting additional information in accordance with Regulation 10(2)(b)(ii) of the EPA (Industrial Emissions) (Licencing) Regulations 2013.

The request from the Agency included a schedule of queries that required clarification and for clarity the headings and numbering used in the request letter from the Agency will be used in this response document. Each query will be included in italics and the response provided below each query.

**1. Provide a copy of the Planners Report and Final Decision for Planning Ref: 17/641. Provide clarification from Kilkenny County Council as to whether an EIS or EIAR was required (Regulation 9(2)(e)).**

The final grant of planning permission and the planners report for Planning Ref. 17/641 is provided in Attachment 1. A Natura Impact Statement was included with the application but an EIS was not required.

**2. Resubmit the installation boundary map to include the existing constructed wetland (and future wetland if proposed) and the sanitary effluent wastewater treatment system. Provide the area in hectares for the revised boundary (Regulation 9(2)(m)).**

The revised site boundary to include the constructed and proposed wetlands and the sanitary effluent treatment system is provided in Attachment 2.

**3. Clarify whether animal raw material is used in the process and whether there is any proposal to use it in the future (Regulation 9(2)(f)).**

All products produced at the Red Mills site are from cereal raw materials and no animal raw materials are used or will be used in the future in the production process in the Feed Mill.

**4. Typical operating hours are provided as 12 hours/day pre-harvest and 24 hours post-harvest. Clarify what months are pre and post-harvest (Regulation 9(2)(i)).**

Harvest can vary depending on weather conditions during a season. Typically harvest runs from July to September or October. Pre-harvest months are usually January to the end of June and the post-harvest months are usually late October to the end of December.

**5. Complete Table G.1 to include amount of materials stored and annual use (Regulation 9(2)(f)).**

Updated Table G.1 is provided in Attachment 3

**6. In relation to air emissions (Regulation 9(2)(j)):**

- a. **Provide the rated thermal input (in MegaWatts) for the two boilers associated with emission points A1-1 and A-2.**

The thermal input for the main Danstoker TDC9 Boiler (A1-1) being checked by the supplier. The standby boiler is also being checked.

- b. **Provide a description of boiler operation and purpose (for generation of water or steam etc.) for which the stage of the process.**

There are 2 steam boilers on site, the main boiler (Danstoker TDC 9 boiler) and a smaller stand-by boiler that is used when maintenance is being completed on the main boiler. The boilers are for the production of steam for the process. The cubers and flakers in the mill are all operated on steam and the steam from the boilers is used in these areas. The stand-by boiler is not typically operated but is run on weekends to ensure that it is in good working order as part of the site maintenance programme.

- c. **Clarify whether the dryers have an emission point for combustion gases and provide details in Section 7.4.1 Emissions to Air, where relevant.**

The systems for the production of hot air in the dryers are located within the dryers and do not have a dedicated emission point for combustion gases. As way of illustration, a photograph of the combustion unit for dryer 6 is provided below.



- d. Provide maximum emission values (including flow rates in m<sup>3</sup>/hour and m<sup>3</sup>/day) for the boiler emission points. Have regard to the European Union (Medium Combustion Plants) Regulations 2017 (S.I. 595 of 2017), where applicable.

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- e. Provide the flow rates (in m<sup>3</sup>/hour and m<sup>3</sup>/day) for all main emissions to air.

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- f. For the air monitoring reports submitted clarify the emission point reference numbers (A2-1, A2-2 etc.) Regulation 9(2)(j)).

The monitoring reports submitted with the application were the result of monitoring completed on the process stacks outlined in the Table below.

Submitted Report Monitoring Location ID	Process Source	Redmills Air Emissions Register Ref.
FF54B – Flaker 2	Flaker No. 2	A2-6
FGEF1 – Flaker 1	Flaker No. 1	A2-5
SVF1 – Extruder 2	Extruder No. 2	A2-15
Cubing	Press Line No. 2	A2-2

- g. Assess the impact of emissions to air using air dispersion modelling having regard to ‘Air Dispersion Modelling from Industrial Guidance Note (Ag4)’ (EPA). You may also have regard to ‘Process Guidance Note 6/26 (13) Statutory guidance for animal feed compounding’ (DEFRA, UK). Regulation 9(2)(k)).

- (i) Include all main process emission points and A1-1 and A1-2 for all relevant parameters.
- (ii) The modelling report shall include tabulated input data of flow rates, concentrations, mass emissions, temperature and efflux velocities.

- h. Show the location of all main emission points to air on a site drawing.

- i. Detail the abatement systems (cyclone/bag filters) on main emissions to air. Provide the efficiency rating/performance specifications for all air abatement equipment.

- j. Resubmit the table ‘Waste Gas – Abatement/Treatment Control’ for the air abatement systems and include details of measures in place to prevent and identify abatement failure e.g. bag filter integrity, air flow and differential pressure gauges. Regulation 9(2)(g)).

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**7. In relation to emissions to water and storm water discharges (Regulation 9(2)(k)):**

- a. Part of the application e.g. Non-Technical Summary (NTS) states that all storm water discharges via oil separators to the constructed wetland, clarify if this is correct. Provide a clear description of the drainage system.**

The surface water drainage system including flow directions showing that all storm water from the site discharges via oil separators are provided in Drawing IE 385\_010 included in Attachment 4. The storm water from the northern section of the site (i.e., Stores Area) discharges to the ICW system to the southeast of the Store V shed via the Catchment Area 3 petrol interceptor. The drain then runs south, beneath the L2642 Local Road to the inlet of Cell 1 of the existing ICW system.

- b. In the assessment of the storage BREF it states that all grain is stored in storage sheds, clarify if this is the case.**

Grain is stored in site sheds whenever possible. However, during harvest season, due to the large volume of grain received at the facility there are times when grain may be temporarily stored in the site yard pending transfer to the grain stores or dryers as soon as possible after arrival on site.

- c. Provide a drainage drawing to include the following:**

- (i) All oil interceptors and areas draining to these; areas draining to the constructed wetland and other area e.g. hardcore.**

A site drawing showing the site drainage system is provided in Drawing IE 385\_010 in Attachment 4.

- (ii) Storm water drainage pipelines discharge locations to surface water and grid reference coordinates (6E, 6N).**

A site drawing showing the site drainage system is provided in Drawing IE 385\_010 in Attachment 4. The coordinates of the existing discharge locations are included in the Table below.

Surface Water Discharge Location	Coordinates (Irish Grid)
Culvert in South Yard of Site	268065N, 154252E
Sample Location 2 – Drainage Ditch on South Side of Road	268174N, 154272E
Discharge from Grain Storage Area in North of Site - Inlet to Cell 1 of ICW	268225N, 154392E
Discharge from Cell 4 of ICW	268277N, 154498E

The locations of the above discharge locations are also shown on Drawing IE1540-001 in Attachment 5.

- d. Specify the type of oil separators in place (Class I or II and full retention or bypass). Clarify if there are any silt traps in place and provide their locations.**

Based on the site surface water management plan prepared in 2006 all oil separators are Class I by-pass type.

- e. Clarify if the storm water discharge outfall pipe from the southern area of the site is accessible for monitoring.**

The surface water discharge from the southern area of the site could be sampled at the current Sample Location 2 on the southern side of the L2637 Local Road between Goresbridge and Bagenalstown or could be sampled from the Drain culvert prior to discharge from the site, see Locations indicated on Drawing IE1540-001 in Attachment 4.

- f. Provide a monitoring location for both the discharge from the grain yard area to the wetland and the discharge from the wetland to the watercourse.**

The Proposed Sampling Locations for the inlet to Cell 1 of the ICW and the discharge from Cell 4 of the ICW are outlined on Drawing IE1540-001 in Attachment 5.

- g. The NTS refers to the water treatment system and a fish tank for assessment of treated water, clarify how this relates to the installation. Also, provide further details on the separation tank, its location and purpose.**

The fish tank is separate from any of the operations on the Redmills site. The tanks were installed to aid the local angling club only. Water is diverted from the stream running through the site to the fish tanks and then directed back to the River.

- h. Regarding the surface water laboratory reports, show monitoring location on a drawing and clarify if they correspond with Locations 1-7 on drawing IE1540-001.**

Monitoring Location	Description
Location 1	Stream to west, upstream of Mill
Location 2	Stream to east downstream of Mill and prior to discharge to River Barrow.
Location 3	Fish Tank Discharge Pipe
Location 4	Drain South of the Wetlands
Location 5	In Surface Drain downstream of Discharge from Cell 4 of ICW
Location 6	River Barrow Upstream of ICW Discharge related to surface water from northern yard area of Mill.
Location 7	Sample From River Barrow Downstream of Mill Site

The sample locations correspond with the sample locations on Drawing IE1540-001. However, potential changes to the sampling locations for the site are provided on the Drawing in Attachment 5. In Attachment 5

there is a proposed surface water sample location at the inlet to Cell 1 of the existing ICW (to replace existing sample Location 4) and 1 at the discharge from Cell 4 of the existing ICW (to replace existing sample location 5).

When the new ICW cells to the north of the current ICW is developed and in use, the discharge from Cell 4 of the existing ICW will no longer discharge to the surface drain and will instead transfer to Cell 1 of the new ICW for further treatment. The proposed sample location for discharge from the ICW system once the new ICW is in use would be at either of the discharge locations (i.e., locations marked “final discharge from Cell 4 to receiving watercourse”) marked on Drawing IE1547-004 in Attachment 6. This will be subject to approval from the Agency following construction and commissioning of the ICW.

**i. Submit Appendices A, D and E of the 2013 ICW planning report.**

The Appendices are provided in Attachment 7.

**j. Confirm whether the truck wash and water treatment system on the site plan are operational.**

The old truck wash and associated water treatment system are not operational and have not been operational for a number of years.

**k. Provide details of any water treatment for abstracted water (softening etc.)**

Water for the site is from a groundwater well located at the northeast of the site. The water has a high hardness content (i.e.,  $\text{CaCO}_3$ ) and is passed through a salt softening system located in the boiler house prior to use. Before the softened water is used in the production boilers it is first treated in a reverse osmosis (RO) system to ensure its purity for use in the process. Photographs of the softening system and the RO system are provided below.





**1. Provide a copy of the discharge licence for the fish farm.**

A copy of the discharge licence from the fish tanks is provided in Attachment 8.

**8. Provide the following information for the constructed wetland (Regulation 9(2)(k)):**

**a. Provide available monitoring data for the wetland inlet and outlet during and outside the harvest period and an interpretation of the results.**

THIS IS CURRENTLY BEING ASSESSED AND WILL BE FORWARDED WHEN AVAILABLE

**b. Provide an assessment of the performance in terms of removal efficiency (for parameters including BOD, COD, suspended solids, ammonia, orthophosphate) of the wetland since its installation.**

The Table below outlines the December 2017 Sampling Results. Any updated analysis results will be forwarded when received.

Parameter	Inlet	Outlet
BOD	1	<1
COD	3	<1
Ammonia	0.16	0.05

**c. Clarify whether the wetland is desludged, how frequently, and provide details of the destination and method or recovery or disposal for the sludge and the waste code, where applicable.**

To date, the wetland ponds have not been de-sludged.

**9. Confirm whether there are any wastes or residues arising from the processing of raw materials and provide details of quantities, waste codes and destinations. (Regulation 9(2)(t)).**

**10. The Baseline Report (Screening) refers to a 5,000 litre diesel tank, however the site plan shows several fuel tanks. Provide details on the fuels stored, purpose and the capacity of each tank. In Section 4.6 a fuel type is listed as other (401 m<sup>3</sup>/year), clarify the fuel type. (Regulation 9(2)(r)).**

The fuel tanks are historic tanks that are no longer in use and were historically filled in and decommissioned. The details of tanks are being assessed and will be forwarded when complete.

**11. Provide a Baseline Report having regard to European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EC on industrial emissions (2014/C 136/03) published on 6<sup>th</sup> May 2014. (Regulation 9(2)(r)).**

The baseline report completed for the site is provided in Attachment 9.

**12. In relation to the requirement to limit, reduce or abate emissions (Regulation 9(2)(k));**

**a. Provide measures taken or planned in the future to limit noise emissions at the installation;**

Although it is not predicted that the continued operation of the Feed Mill site will have a significant impact on the noise climate in the area there are a number of mitigation measures that could be employed to ensure that any noise impacts are minimised as low as practicable;

- Truck speeds are restricted on site as a safety measure and will also reduce the noise output from engines. Idling of trucks in the vicinity of noise sensitive receptors should also be restricted to reduce potential noise impacts.
- Site plant and equipment should have preventative maintenance carried out to ensure that they are not potential noise sources outside the site boundary (e.g., replacement of worn bearings or pullets when they are first assessed to be an issue). This would ensure that plant and equipment would operate optimally and not emit a high noise output.
- The doors to the Mill facility should be kept closed to restrict any noise from plant inside the building emitting to noise sensitive receptors.
- Where practicable, space ventilation fans should only be run when required and switched off when not needed.
- Truck deliveries at night should be assessed to ensure that they do not cause nuisance outside the site boundary. All trucks delivering to site should have proper maintenance completed and be operated in a manner that would not be the source of undue noise impact (e.g., noisy exhausts and using air brakes in Village area or close to houses).
- An annual assessment of noise level will be completed to assess boundary noise levels and identify any potential noise sources on site that requires mitigation.

**b. Provide measures taken or planned to minimise dust deposition levels at the installation.**

Although it is not predicted that the operation of the Feed Mill site will have a significant dust deposition impact on the area there are a number of mitigation measures that could be employed to ensure that dust impacts are minimised as low as practicable;

- The surface of the internal access road and yard areas are concrete surfaced to reduce potential dust emissions from truck and traffic movements.
- The road and yard surfaces would be monitored and cleaned to remove any potential dust source material, particularly during dry weather periods.
- Truck speeds are restricted on site to reduce potential for dust emissions from vehicle movements on site.
- During dry periods a water bowser/sprayer or surface sweeper could be used to dampen site surfaces and clean surfaces if they are considered a source of dust nuisance.
- Where possible all grain will be stored inside grain store buildings and/or will be moved inside as soon as possible following reception on site.

- All major air emission locations have dust mitigation measures in place (e.g., filter socks and/or cyclones) to remove and reduce dust emissions from the site process.

**Submit a Natura Impact Statement, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended. The NIS shall address all emissions from the installation.**

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**Provide an updated non-technical summary (Application Form and EIS where applicable) to reflect the information provided in your reply, insofar as that the information impinges on the non-technical summary.**

WILL BE SUBMITTED WHEN EMISSION FLOW MEASUREMENTS ARE COMPLETED ON SITE & AIR EMISSIONS MODEL HAS BEEN COMPLEETD FOR THE SITE AND NIS HAS BEEN UPTADATED.

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# ATTACHMENT 1

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## Planning Report for 17/641

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## ATTACHMENT 2

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### Revised Site Boundary Drawing

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# ATTACHMENT 3

## Table G.1

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# ATTACHMENT 4

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## Drainage Drawing IE385\_010

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## ATTACHMENT 5

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### Surface Water Sampling Locations – Drawing IE1540-001

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# ATTACHMENT 6

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## Proposed ICW Layout – Drawing IE1547-004

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## ATTACHMENT 7

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### Appendices A, D and E of 2013 ICW Planning Report

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## ATTACHMENT 8

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### Fish Tank Discharge Licence

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# ATTACHMENT 9

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## Baseline Report

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