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"TOTAL HAZARDOUS WASTE MANAGEMENT"

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26th October 2016

IPPC Licence No:	<i>W0192-03</i>
Company	<i>RILTA Environmental Limited</i>
Subject	Re: Request for Technical Amendment

Dear Sir/Madam,

I refer to our email correspondence to Mr. Brian Meaney on 26 October 2016 regarding our proposed changes to Licence Ref. W0192-03. We are proposing to install a bagging plant for the bagging and transfer of ash waste residue from the Dublin Waste to Energy (WtE) Plant located in Poolbeg, Co. Dublin. In accordance with the EPA Guidance for Licensees on requests for alterations to the installation/facility, in order to determine if the proposed changes can be accommodated by Technical Amendment, the Agency requires the following information:

1. Details of requested change(s);
2. Reasons for the changes requested;
3. Details of any increase of changes in emissions resulting from the change(s); and
4. An assessment of the likely impacts of any increase/changes in emissions

This cover letter and associated attachments is intended to meet this Agency requirement.

It is important to highlight at the outset that the requested changes in this Technical Amendment submission will only involve the bagging and transfer of waste materials in a purpose built waste transfer building. The changes do not involve the processing of waste in any way. Furthermore, there is no change to any class of activity or process, additional emission point, conflict with BAT or increase in existing capacity limitations in Licence W0192-03.

Summary of TA submissions for Rilta Licences W0185-01 and W0192-03

We have prepared three (3 no.) Technical Amendment submissions (TAs) for RILTA's facilities in Greenogue Business Park, which are summarised as follows:

- A. W0185-01 (**bagging and storage racking** for filled FIBCs pending transfer) - submitted to Agency on 14th Oct 2016;
- B. W0192-03 (**bagging only** of ash residues) - due for submission to Agency on Friday 28th Oct 2016;
- C. W0185-01 (**storage racking only** for filled FIBCs pending transfer) - due for submission to Agency on Tues 1st Nov 2016.

The reasoning behind our approach is to build in as much flexibility as possible into our two licenses in order to accommodate the Dublin WtE project. This key waste infrastructure is due for commissioning in early 2017, hence our applications for changes to our two waste licences.

It is important to note that **our preference** (and the most sustainable approach) is for **both bagging and storage activities** to be undertaken at the one facility i.e. W0185-01 (**Submission A** above).

We respectfully submit that should the Agency deem that bagging and storage can be accommodated by way of TA at W0185-01 (Submission A), there is no need for the Agency to progress with the assessment of Submissions B and C above.

1.0 DETAILS OF PROPOSED CHANGES

A document entitled 'Detailed Report on Requested Changes to W0192-03' is included in **Attachment 1** of this document. A summary of the proposed installation is provided below:

- a) Installation of three storage silos (Total Usable Volume / Tonnage = 525 m³ / 262 tonnes);
- b) Installation of a pressure transfer system;
- c) Installation of two bulk bag loading systems (for main use and one for back-up/redundancy); and
- d) Control measures to prevent fugitive emissions.

Attachment 2 provides details of the proposed Technical Amendment changes to Licence No. W0192-03 to accommodate the bagging and transfer of ash waste residues for onward international recovery. We have proposed three changes (**blue text in Attachment 2**), namely:

1. **Change to Condition 6 - add Condition 6.26** - for the control of ash waste residues. This new Condition 6.26 is intended to provide adequate operational measures to ensure protection of the environment;

2. **Change Schedule A2** – Whilst these codes are already approved in Waste Licence W0192-03, it is considered appropriate to include the relevant codes and tonnages for the ash waste residues to provide for consistency in the Licence;
3. **Change to Schedule C – add Table C.10** - Additional air monitoring to establish air quality in the waste transfer building. Further details on monitoring are provided in **Attachment 1** of this submission in the Report entitled 'Detailed Report on Requested Changes for RILTA W0192-03'.

We also welcome the Agency amending the Licence as they see fit in order to accommodate the requested changes in this submission.

2.0 REASONS FOR REQUESTED CHANGES

2.1 Dublin Waste to Energy Facility

The proposed change at the RILTA facility is to accommodate the transportation of ash waste residues from the Dublin Waste to Energy (WtE) Facility. We note the original EPA Inspector's Report for the WtE Facility (Ref. No. W0232-01, 21 June 2007):

***Pg. 11:** Flue Gas treatment Residues:- These wastes comprise fly ash from the fourth pass of the boiler and a mix of reaction products, excess lime, and spent activated carbon which is collected in the fabric filters. **Approximately 24,000 tpa** of this waste stream is expected to be produced per annum. These wastes are expected to be classed as hazardous (depends on test results) and will be sent off site for disposal in an approved hazardous waste facility.*

***Pg. 17:** If suitable landfill is not available in Ireland for the unrecoverable residues, then export of the residues will be necessary. If no recovery or disposal outlet for the incinerator residues is located nationally or internationally then the activity cannot commence processing waste; or if such outlets cease to be available then the activity will have to cease processing waste.*

2.2. Murphy Environmental Hollywood Ltd:

We note the Final Determination for an application of an IED Licence to dispose of ash waste residues (Ref. No. W0201-03) dated 6 January 2016:

***Page 1:** Agency hereby refuses to grant an Industrial Emissions licence to Murphy Environmental Hollywood Limited, Hollywood Great, Nag's Head, Naul, County Dublin*

2.3 Born Na Mona Drehid

We note the Inspector's report for Drehid Landfill (Ref. No. W0201-03) dated March 2016:

***Pg. 3:** Regarding the temporary 7-year increase to 360,000 tonnes up to end-2015, the licensee explains that this was proposed in 2008 as a response to delays in the delivery of significant waste management infrastructure, particularly the Dublin waste to energy facility which, it is now known, will be available towards mid-2017.*

2.4 Reasons for Changes Requested

As highlighted above, the Dublin WtE Facility is nearing completion. This is a critical infrastructure project, and has been clearly outlined in Waste Management Plans for the Region for some time. The roll out of the project has however been delayed, as demonstrated by the need to extend the life of the Bord Na Mona Facility at Drehid a number of occasions, most recently in March 2016.

In addition, following the decision to refuse the Murphy Hollywood application for a hazardous waste landfill to accept hazardous ash waste residues, the option for disposal nationally is not currently available in Ireland.

Furthermore it is important to highlight the findings of the EPA Inspector's Report in 2007, that if an outlet for recovery or disposal is not available nationally or internationally, then the activity cannot commence.

The Dublin WtE Facility is scheduled to commence trials in January 2017 ('first fire') and in turn will begin to produce ash waste. The proposed changes, which are the subject of this TA submission, are intended to meet this project schedule, and deliver an appropriate recovery outlet for hazardous ash waste residues from the WtE facility. RILTA has put in place arrangements with a fully permitted recovery outlet in Norway, subject to changes in Licence W0192-03 (bagging only), and changes in Licence W0185-01 (storage only), as submitted.

Following storage in Rilta Facility W0185-01, the material will be shipped to the treatment facility in Norway for sustainable re-use. Ash waste residue will be used to neutralise sulphuric acid at the Langoya facility in Norway. Langoya is a small island dominated by a worked out limestone quarry which is being reinstated as a nature reserve under licence from the Norwegian government (See **Attachment 1**).

3.0 DETAILS OF ANY INCREASE IN EMISSIONS FROM CHANGES

3.1 Bagging Plant – Closed Process

The bagging plant under consideration is designed as a closed process, with no emissions to air, soil or water. Section 5.0 of the Report entitled 'Detailed Report on Requested Changes for RILTA W0192-03' (**Attachment 1**) provides additional information on the installation demonstrating the nature of this closed process, which includes:

- a) Compressor from bulk tanker;
- b) Storage silos;
- c) Sealed bag filling system;
- d) Laminated FIBC bags;
- e) Fast shutting doors;
- f) Dust curtains; and
- g) Contingency arrangements in the event of failures.

Notwithstanding that there are no emissions from this bagging process, a review of the 2007 Licence Review Application and associated EIS has been undertaken. The 2007 Licence Review was undertaken to allow for an increase in the annual volume of contaminated soil that is stored at this facility prior to transfer off-site (48,500 tonnes increase, mainly to facilitate additional volumes of contaminated soil accepted and transferred from the site).

A review of the EIS 2007 (**Attachment 3** of this submission) is intended to demonstrate that the installation of bagging for ash waste residues is comparable to the plant, processes, waste types and activities that were considered in the 2007 Waste Licence Review Application and associated Environmental Impact Assessment.

Firstly it is worth noting that Licence No. W0192-02 was granted on 22nd July 2010 for the following activities and infrastructure, as set out in the introduction to the Licence:

'Rilta Environmental Limited operate a hazardous waste treatment facility at Greenogue Business Park, Rathcoole, County Dublin. The quantity of waste to be accepted at the facility is limited to 111,000 tonnes per annum consisting of hazardous waste, commercial waste, construction and demolition waste, industrial sludges and industrial waste.

The facility comprises two main buildings which house three distinct operations:

(i) Drum Recovery Centre

Reconditioning or recycling of empty industrial packaging such as steel drums, plastic drums and intermediate bulk containers (IBCs). There are 3 emission points to atmosphere from the Drum Recovery Centre.

(ii) Hydrocarbon Waste Treatment Centre

Treatment/recovery of hydrocarbon-contaminated waste from sources such as bilge tanks of ships, petrol stations and oil spills. Trade effluent arising from the waste treatment is discharged to sewer under the consent of the Water Services Authority (South Dublin County Council).

(iii) Hazardous Waste Transfer Station

Bulking up and transfer of hazardous waste (including asbestos and contaminated soil) for disposal/recovery.

*The licence review was required primarily to facilitate an increased throughput of **contaminated soil** at the facility. There will be no change to the infrastructure on-site and no processing of this soil on-site, with the exception of **handling and storage**'.*

3.2 2007 EIS Review

A detailed Environmental Impact Statement (EIS) was submitted with the 2007 Licence Review Application for the EPA's consideration. **Attachment 3** consists of a review of this 2007 EIS in the context of the proposed bagging of ash waste residue, which is the subject of this Technical Amendment submission.

This EIS review demonstrates that materials comparable to ash waste residues were assessed in the 2007 application (granted 2010), namely contaminated soils. The EIS review also demonstrates that there is no increase in emissions or associated impacts on the following environmental media:

- Human beings;
- Traffic;
- Noise;
- Air;
- Geology and Hydrogeology;
- Surface water;
- Cultural Heritage;
- Ecology; and
- Landscape.

4.0 ASSESSMENT OF IMPACTS OF ANY INCREASE/CHANGES IN EMISSIONS

4.1 Appropriate Assessment Screening Report

As part of the TA process, an Appropriate Assessment (AA) screening report has been prepared for the requested changes, and is provided in **Attachment 4** of this submission.

The AA screening report has concluded that there are no likely significant adverse effects on the qualifying interested or the conservation objectives of any European Site as a result of the requested changes.

4.1 Monitoring for fugitive emissions

As highlighted in Section 3.0 above, no increases or changes in emissions are envisaged as a result of the requested changes to the Licence under TA. Notwithstanding this, further control measures have been proposed to validate that there is no release of fugitive emissions following result of the installation of this closed bagging process, namely:

- a) Baseline monitoring prior to the acceptance of ash waste residues;

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- b) Personnel air monitoring and fixed/static monitoring quarterly once operations commence;
- c) Parameters to be monitored are the same as those as set out in the Dublin WtE Facility Licence Ref. W0232-01; and
- d) Method used shall meet the requirements of the "Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001" and associated 2016 Approved Code of Practice published by the Health Safety Authority. Monitoring shall be carried out by an independent laboratory agreed by the Agency.

5.0 BEST AVAILABLE TECHNOLOGY (BAT) REVIEW

For the purposes of this TA submission, two BAT Documents have been consulted, namely:

- a) Reference document of Best Available Techniques for the Waste Treatments Industries (2006); and
- b) Reference document of Best Available Techniques on Emissions from Storage (2006)

BAT for Waste Treatments 2006 (Pg. 68) states the following:

A technique in large-scale use, includes the curing of fly ash with aqueous neutral or acidic liquors to give a granular output prior to landfill.

The proposed recovery of ash waste residues from the Dublin WtE Plant for the reinstatement of Langoya Island in Germany is intended to meet this BAT principle.

BAT on Emissions from Storage (Pg. 216) states the following with regard to large volume silos in order to minimise dust from storage:

'Silos are generally used to protect the product against external input (e.g. rain) or to avoid losing valuable product. They are also commonly applied when the solid material is a powder or contains a sufficient quantity of dust which can cause a significant environmental impact. Examples of bulk materials that are stored in silos when they are in powder or pulverised forms are: FGD-gypsum, potato starch, finely crushed limestone, fly ash, fertiliser and pulverised coal.'

Driving force for implementation: The use of silo systems is suitable in those cases where only small storage areas are available, the storage capacities are limited and the requirements for preventing emissions are relatively high'.

The closed process for offloading to silos and all other control measures described in **Attachment 1** of this submission are intended to meet this BAT principle of preventing emissions by using such silo structures and associated infrastructure.

6.0 CONCLUSIONS

- a) The Detailed Report on Requested Changes to W0192-03 (**Attachment 1**) demonstrates that the bagging of ash residue (closed system) at this Facility can be undertaken responsibly and not give rise to fugitive emissions;
- b) Further control measures and monitoring have been highlighted in **Attachments 1 and 2** to provide additional safeguards to employees and the environment;
- c) Monitoring has also been proposed to validate that all the measures and design steps are performing as expected;
- d) The need for the requested change has been demonstrated in this letter. As noted by the EPA Inspector's Report in 2007, this critical WtE infrastructure cannot commence processing waste until an appropriate outlet for the ash waste residue is in place. As there is no appropriate outlet in Ireland at present, RILTA has put in place arrangements with a fully permitted recovery outlet in Norway, subject to approval of this TA;
- e) A review of the 2007 EIS for this facility (**Attachment 3**) demonstrates that materials comparable to ash waste residues were assessed in the 2007 licence review application, namely contaminated soils. The Rilta facility W0192-03 can therefore accommodate such a comparable waste stream. The EIS review also demonstrates that there is no increase in emissions or associated impacts on environmental media;
- f) An AA screening Report (**Attachment 4**) has concluded that there are no likely significant adverse effects on the qualifying interests or the conservation objectives of any European Site as a result of the requested changes.
- g) The material will be stored at Rilta W0185-01 (subject to Technical Amendment) and then shipped to the treatment facility in Norway for sustainable re-use, and will be used to neutralise sulphuric acid at the Langoya facility in Norway; and
- h) The storage of ash waste materials in silos only, bagging and the sustainable re-use in Norway meets BAT Documents for Emissions from Storage (2006) and Waste Treatments Industries (2006).

Based on the above conclusions, it is respectfully submitted to the Agency that the requested changes as set out in **Attachment 2** (or similar) can be accommodated under Technical Amendment.

Furthermore, given the ash waste residues will begin to be produced from January 2017 once the 'first fire' and associated tests commence, the Licensee wishes to highlight the time constraints of this critical Waste to Energy infrastructure. This TA request will form an integral part of this critical infrastructure, and therefore we respectfully request that this TA submission can be considered in an expeditious manner.

Finally it is noted that another TA submission will be made concurrently for the storage of filled FIBCs at W0185-01, pending transfer for recovery in Norway.

If you have any queries regarding this submission, please do not hesitate to contact the undersigned

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Yours sincerely

RILTA Environmental Ltd. (Part of Clearcircle Division)



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c.c. Ms. Rachel Griffith

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ATTACHMENT 1

Detailed Report on Requested Changes to W0192-03

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ATTACHMENT 2

Proposed Technical Amendment Changes to W0192-03

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ATTACHMENT 3

Review of 2007 EIS as submitted with Waste Licence Review
Application for W0192-02

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ATTACHMENT 4

AA Screening Report

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