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"TOTAL HAZARDOUS WASTE MANAGEMENT"

RILTA Environmental Ref: ENV3216.epa

14th October 2016

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IPPC Licence No:	*W0192-03*
Company	*RILTA Environmental Limited*
Subject	Re: Request for Technical Amendment

Dear Sir/Madam,

I refer to your letter dated 9th September 2016 regarding our proposed changes to Licence Ref. W0185-01. We are proposing to install a bagging plant and associated pallet racking for the storage and transfer of ash waste residue from the Dublin Waste to Energy Plant located in Poolbeg, Co. Dublin. The Agency has requested the following information in order to determine if the proposed change can be accommodated by Technical Amendment, namely:

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 request.

It is important to highlight at the outset that the requested changes in this Technical Amendment submission will only involve the bulking-up 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 W0185-01.

1.0 DETAILS OF PROPOSED CHANGES

A document entitled 'Detailed Report on Requested Changes to W0185-01' 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);

d) Installation of a pallet racking system for the warehouse; and

e) Control measures to prevent fugitive emissions.

Attachment 2 provides details of the proposed Technical Amendment changes to Licence No. W0185-01 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 5 - add Condition 5.18** - for the control of ash waste residues. This new Condition 5.18 mirrors the content of an existing Condition 5.8 for asbestos waste, and is intended to provide adequate operational measures to ensure protection of the environment. By mirroring an existing condition, this new condition also provides a consistent approach to how the conditions are set out in the Licence;

2. **Change Schedule A1** – A waste type compatible with the facility has been added, namely ash waste residues (and two associated List of Waste Codes). We have also added an additional **Note 3** to be consistent with other more recent waste licences, including RILTA W0192-03. It is noted that here is no change to the maximum tonnages per annum; and

3. **Change to Schedule D – add Table D.9.1** - Additional air monitoring which again mirrors monitoring requirements for the asbestos waste stream 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 W0185-01'.

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 24,000tpa 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 Inspectors 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 W185-01 as submitted.

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 and Racking – Closed Process

The bagging plant and pallet racking 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 W0185-01' (**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 and loading bay seals;

f) Dust curtains; and

g) Contingency arrangements in the event of failures.

Notwithstanding that there are no emissions from this bagging and storage process, a review of the original licence application and associated EIS has been undertaken. This review is intended to demonstrate that the installation of bagging and pallet racking for ash waste residues is comparable to the plant, processes, waste types and activities that were considered in the original Waste Licence Application and associated Environmental Impact Assessment.

Firstly it is worth noting that Licence No. W0185-01 was granted on 31 May 2004 for the following activities and infrastructure, as set out in the introduction to the Licence:

> *'Operation of a **hazardous waste transfer station** at a facility of Cara Waste Management Limited. The transfer station is designed to be capable of handling 60,000 tonnes of waste per annum of which **33,000 tonnes will be hazardous waste** while the remaining 27,000 tonnes will be non-hazardous.*
>
> *The principal elements of the development are listed as follows:*
>
> - ***Main warehouse building to be used for the handling and bulking of waste prior to onward transport to relevant recycling/recovery/disposal facilities**.*
> - *Site infrastructure including a weighbridge, **transfer building**, office building, access road and car parking facilities.*
> - ***Hazardous waste storage facilities**.*
> - *3 tanker parking bays.*
>
> *The activities at this facility will entail acceptance, **sorting and repackaging/bulking-up of waste** including household hazardous waste, dismantling of waste electrical and electronic equipment (WEEE), provision of tanker overnight parking facility and onward shipment to recycling/recovery and disposal facilities.*
>
> *The licensee is required to manage and operate the facility to ensure that the activities do not cause environmental pollution. The licensee is required to carry out regular*

environmental monitoring and submit all monitoring results, and a wide range of reports on the operation and management of the facility to the Agency.

3.2 EIS Review

A detailed Environmental Impact Statement (EIS) was submitted with the 2002/2003 Licence Application for the EPA's consideration. **Attachment 3** consists of a review of this 2002 EIS in the context of the proposed bagging and storage of ash waste residue, which is the subject of this Technical Amendment submission.

This review demonstrates that materials comparable to ash waste residues were assessed in the original application, namely contaminated soils. Having been previously assessed in the original licence application, all infrastructure that is currently in place can accommodate such a comparable waste stream. The 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
- 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 process, namely:

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

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) Methods used will meet the requirements of the “Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 and associated HSA Guidance 2004". 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 Waste to Energy 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 large volume silo structures and associated infrastructure.

6.0 CONCLUSIONS

a) The Detailed Report on Requested Changes to W0185-01 (Attachment 1) demonstrates that the bagging of ash residue (closed system) and storage of same 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 2002 EIS for this facility (Attachment 3) demonstrates that materials comparable to ash waste residues were assessed in the original application, namely contaminated soils. Having been previously assessed in the original licence application, all infrastructure that is currently in place can accommodate such a comparable waste stream. The 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 interested or the conservation objectives of any European Site as a result of the requested changes.

g) The material will be 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, 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 from an integral part of this critical infrastructure, and therefore we respectfully request that this TA submission can be considered in an expeditious manner.

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

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Yours sincerely
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c.c. Ms. Rachel Griffith

ATTACHMENT 1

Detailed Report on Requested Changes to W0185-01

ATTACHMENT 2

Proposed Technical Amendment Changes to W0185-01

ATTACHMENT 3

Review of 2002 EIS as submitted with original Waste Licenence Application for W0185-01

ATTACHMENT 4

AA Screening Report