



Objection

Objector:	Mr. John Rea
Organisation Name:	JOHN REA ENVIRONMENTAL LIMITED
Objector Address:	Purcellsinch Business Park, Carlow Road, Co. Kilkenny.
Objection Title:	Rec'd by post with email address
Objection Reference No.:	OS005491
Objection Received:	25 April 2019
Objector Type:	Applicant
Oral Hearing Requested?	No

Application

Applicant:	Miltown Composting Systems Limited
Reg. No.:	W0270-02

See below for Objection details.

Attachments are displayed on the following page(s).



JRE Ltd.
Purcellsinch Business Park
Carlow Road,
Kilkenny,
Co. Kilkenny

tel: 056 771 2836
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April 23, 2019

Environmental Licensing Programme,
Office of Environmental Sustainability,
Environmental Protection Agency,
PO Box 3000,
Johnstown Castle Estate,
Co. Wexford, Y35 W821.

Re: Objection to Conditions in PD Licence Number W0270-02

On behalf of Milltown Composting Systems Ltd. (Milltown), please find attached an objection to the Proposed Determination issued by the Agency on April 1st 2019 in respect of an Industrial Emissions (IE) Licence Application (Ref. W0270-02). This objection is made by Milltown in relation to a number of conditions or schedules within the Proposed Determination for W0270-02. In certain instances, the purpose of the objection is to provide for clarification on the condition or schedule. The grounds of the objection are stated in full including the reasons, consideration and arguments on which they are based.

A cheque for €253 is included in respect of the objection fee.

Yours sincerely,

John Rea, B.Sc., MEnv.Sc
Principal Environmental Consultant
JRE Ltd.

On behalf of Milltown Composting Systems Ltd.



permanent tsb

Marble City Arcade High Street Kilkenny

99-06-36

DATE 23/04/2019

permanent tsb p.l.c. DLPS 1661

PAY Environmental Protection OR ORDER

Agency. Two Hundred

€ 253.- 00

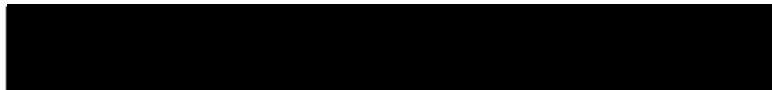
and Fifty Three Euro.

JOHN REA ENVIRONMENTAL LTD
MR JOHN REA (S)



IRELAND 140214 This cheque contains invisible uv and microtext security features

John Rea



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ENVIRONMENTAL PROTECTION
AGENCY

29 APR 2019

**OBJECTION TO ENVIRONMENTAL PROTECTION AGENCY ON
CONDITIONS CONTAINED IN PROPOSED DETERMINATION
INDUSTRIAL EMISSIONS LICENCE FOR MILLTOWN COMPOSTING
SYSTEMS LTD. SITE, MILLTOWNMORE, FETHARD, CO. TIPPERARY
(LICENCE REG. NO. W0270-02)**

Submission by;

JRE Limited,
Purcellsinch Business Park,
Carlow Road,
Kilkenny,
Co. Kilkenny

On the Behalf of;

Miltown Composting Systems Ltd.,
Miltownmore,
Fethard,
Co. Tipperary

Submission To:

Environmental Protection Agency.

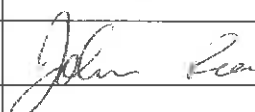


3296

April 19th, 2019

DOCUMENT CONTROL SHEET

Licensee	Milltown Compost Systems Ltd.
Licence Review Number	W0270-02
Site	Milltown Composting, Milltownmore, Fethard, Co. Tipperary
Document Title	Objection to Conditions contained within the Proposed Determination (PD) licence W0270-02 for the Milltown Composting site.

Revision	Status	Author	Reviewed by	Approved By	Issue Date
00	Draft	JR		JR	23/04/2019
01	Final				

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1.0 INTRODUCTION

This document is made to the Environmental Protection Agency (EPA) to object to a number of conditions included in the Proposed Determination (PD) for Industrial Emissions (IE) Licence W0270-02. The objections are made in accordance with Section 87(5) of the EPA Act 1992 as amended.

This document outlines the existing licence conditions for the site, the PD conditions for the site and reasoning for the objections to the relevant PD conditions.

SCHEDULE C

Schedule C.1.1 – Control of Emissions to Air

Biofilters – Emission points A2-1 (Biofilter 1) and A2-2 (Biofilter 2)

Control Parameter	Current Monitoring Frequency for Licence W0270-01	Proposed Monitoring Frequency For Licence W0270-02
<i>Ammonia</i>	Bi-Annual(at inlet and outlet)	Monthly (at inlet and outlet)
<i>Hydrogen Sulphide</i>	Bi-Annual(at inlet and outlet)	Monthly (at inlet and outlet)
<i>Mercaptans</i>	Bi-Annual(at inlet and outlet)	Monthly (at inlet and outlet)
<i>Amines</i>	Bi-Annual(at inlet and outlet)	Monthly (at inlet and outlet)

The current licence requirements for sampling as part of licence W0270-01 are for bi-annual sampling for odour parameters at the inlet and outlet to biofilter 1 (i.e., emission point A2-1 - located south of shed 1). The PD Licence (W0270-02) proposes to significantly increase the sampling frequency to monthly. It is acknowledged that similar sampling that is currently completed at biofilter A2-1 for Shed 1 is required for the new biofilter (i.e., A2-2 at biofilter 2) associated with the new air extraction system in sheds 2 and 3. However, Milltown object to the significant increase in sampling frequency included in licence W0270-02 for the sampling at both biofilter beds.

Grounds for Objection

Based on historical (i.e., 2016, 2017 and 2018) results for sampling completed at the inlets and outlets at A2-1 (i.e., the biofilter for extracted air from the process shed) the concentrations of ammonia, hydrogen sulphide, mercaptans and amines at the biofilter have all been less than the licence limits set in Schedule B of licence W0270-01, see Table A in Attachment 1.

The historical results for sampling completed at the inlets and outlet of the process shed biofilter (i.e., A2-1) indicate no elevated concentrations of odour based compounds and it would appear excessive to request that the frequency of sampling would increase to monthly as part of the new licence. Also, the air extracted from sheds 2 and 3 are post processing and would have concentrations of odour compounds much less than the air extracted from process Shed 1 and as such it would also seem excessive to request such a sampling frequency for location A2-2 where the concentrations of odour based compounds would be expected to be less than at A2-1.

Since the site has been in operation (i.e., ca. 2004) there have been no complaints received from any neighbours related to odour. Milltown feel that their operation is not a source of odour nuisance to their neighbours and feel that the frequency of sampling is excessive and unnecessary.

Licensee Request

It is requested that the sampling frequency for the inlets and outlets at A2-1 and A2-2 be revised back to bi-annual as is the frequency of sampling for the current site licence W0270-01.

Control Parameter	Proposed Monitoring Frequency For Licence PD W0270-02	Licensee Requested Monitoring Frequency for Licence W0270-02
<i>Ammonia</i>	Monthly (at inlet and outlet)	Bi-Annual (at inlet and outlet)
<i>Hydrogen Sulphide</i>	Monthly (at inlet and outlet)	Bi-Annual (at inlet and outlet)
<i>Mercaptans</i>	Monthly (at inlet and outlet)	Bi-Annual (at inlet and outlet)
<i>Amines</i>	Monthly (at inlet and outlet)	Bi-Annual (at inlet and outlet)

Schedule C.1.1 – Control of Emissions to Air

Bed Media & General

Control Parameter	Current Monitoring Frequency for Licence W0270-01	Proposed Monitoring Frequency For Licence W0270-02
<i>Moisture Content</i>	Bi-Annually	Monthly
<i>Negative Pressure Across biofilter</i>	Bi-Annually	Monthly

The licence requirements for licence W0270-01 are for checks on the biofilter media on a bi-annual basis to assess the moisture content of the media in biofilter 1. The new licence conditions require for these checks to be increased to monthly for both biofilter 1 and the new biofilter 2 as well as completing monthly checks on negative pressure across the biofilter. This is a significant increase in the frequency of checks and will require increased man hours to have them completed. Milltown object to the significant increase in frequency of checks included in licence W0270-02 for both biofilter beds.

Grounds for Objection

The historical results (i.e., between 2016 and 2018) for biannual moisture checks completed on biofilter 1 indicate that the moisture content has been between 63.79% and 74.9%, see Table below.

Moisture Content of Media in Biofilter 1 – 2016 to 2018

Moisture Assessment	2016 Result (% Moisture)	2017 Result (% Moisture)	2018 Result (% Moisture)
Biannual Test 1	74.9	70.83	63.79
Biannual Test 2	72.1	69.21	72.03

Within BAT the typical moisture requirement for biofilter media is between 60% and 80% and the media within biofilter 1 has always met that requirement based on biannual checks. It is considered that the moisture content within the biofilter has never been an issue or impediment to the operation of the biofilter and that this will also be the case with biofilter 2 which handles extracted air from Sheds 2 and 3. It seems excessive to request monthly moisture checks when the biannual checks have shown that the moisture content of the biofilter media has always met the range required by BAT. Milltown also object to the frequency of the negative pressure

checks across the biofilters and feel that these should be completed on a similar frequency to the moisture checks (i.e., biannually, as per licence W0270-01).

Licensee Request

It is requested that the checks for moisture content in the biofilter media in biofilters 1 and 2 be revised back to bi-annual as is the frequency of sampling for the current site licence W0270-01. We would also request that the negative pressure checks on the biofilter would be completed at the same time as the moisture checks (i.e., bi-annually).

SCHEDULE C.5

C.5.1 – Dust Deposition and Micro-Organisms

Dust Deposition

Parameter	Current Monitoring Frequency for Licence W0270-01	Proposed Monitoring Frequency For Licence PD W0270-02
Dust Deposition	3 times per year	Quarterly

Schedule C.5.1 of the PD licence W0270-01 indicates that dust deposition for the licence will increase from 3 times per year to quarterly. Milltown object to the increase in sampling frequency based on the historical dust deposition results for the site.

Grounds for Objection

Sampling as part of the current licence (W0270-01) is completed 3 times per year with 2 of those sampling events taking place between May and September when fugitive dust concentrations would be expected to be highest. A review of dust deposition results for the past 3 years (i.e., 2016, 2017 and 2018) indicated that samples were collected between April and November and that no samples collected in the previous 3 years had exceeded the licence limit of 350mg/m²/day, see Table C in Attachment 1.

The addition of an extra sample period would be for quarter 1 of the year (i.e., between January and March) when rain levels are high and the potential for fugitive dust generation on site is typically at its lowest and would serve no purpose for assessing dust impact from the site considering the site does not exceed the limit during the periods of the year when the potential for dust impacts are highest.

Licensee Request

Milltown request that the frequency for dust deposition sampling be reduced back to 3 times per year in line with the Schedule for dust sampling frequency included in W0270-01.

Micro-Organisms

Parameter	Current Monitoring Frequency for Licence W0270-01	Proposed Monitoring Frequency For Licence PD W0270-02
<i>Bacteria</i>	Annually	Quarterly
<i>Aspergillus fumigatus</i>	Annually	Quarterly

The current licence requirements are for annual sampling at the closest sensitive receptor, and at upwind and downwind locations at the site. The PD licence W0270-02 proposes that the frequency of sampling would increase from annually to quarterly, Milltown object to the increased frequency of sampling. It is acknowledged that there will be an increased throughput and there is an additional biofilter system in place at the site and there is a requirement to assess the potential impacts associated with the site changes on sensitive receptors and upwind and downwind sampling locations. However, Milltown feel that the increased frequency of sampling appears excessive when compared to the current sampling regime.

Grounds for Objection

All results for micro-organism sampling in the past 3 years (i.e., 2016 – 2018) has indicated no issues with airborne bacteria or aspergillus concentrations, see Table B in Attachment 1. None of the historical results have indicated an issue with bioaerosol concentrations at sensitive receptors, downwind or upwind of the site. The results for concentrations of aspergillus fumigatus for all sample events were 0 for all sample locations between 2016 and 2018 indicating no impact to receptors from the site activities. Taking the upwind concentrations as a baseline for natural bacteria concentrations the percentage increase/decrease at downwind and sensitive receptors was calculated to provide a rough estimate of the impact that the site may be having on airborne concentrations. The results are outlined below:

2016 Airborne Bacteria Concentration Comparisons

2016 Upwind (cfu/m ³) - Baseline	2016 Sensitive Receptor (cfu/m ³)	% Increase / Decrease at Sensitive Receptor	2016 Downwind (cfu/m ³)	% Increase / Decrease at Downwind Location
180	42	-328%	57	-215%
64	35	-83%	54	-18%

2017 Airborne Bacteria Concentration Comparisons

2017 Upwind (cfu/m ³) - Baseline	2017 Sensitive Receptor (cfu/m ³)	% Increase / Decrease at Sensitive Receptor	2017 Downwind (cfu/m ³)	% Increase / Decrease at Downwind Location
131	193	+47%	180	+37%
207	221	+6%	220	+6%

2018 Airborne Bacteria Concentration Comparisons

2018 Upwind (cfu/m ³) - Baseline	2018 Sensitive Receptor (cfu/m ³)	% Increase / Decrease at Sensitive Receptor	2018 Downwind (cfu/m ³)	% Increase / Decrease at Downwind Location
161	76	-53%	214	+25%
133	147	+9%	107	-19%

The results indicate that the area has a high potential for natural background concentrations of airborne bacteria that is not attributable to the Milltown site. Based on the results from the annual sampling from the previous 3 years it would seem excessive to increase the frequency of sampling from annually to quarterly.

Licensee Request

Milltown request that the frequency for bioaerosol sampling in licence W0270-02 be reduced back to annually in line with the Schedule for bioaerosol sampling frequency included in licence W0270-01.

CONDITION 8.6

The wording of Condition 8.6 of PD Licence W0270-02 is similar to the wording of Condition 8.7 of licence W0270-01 - *“Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste and materials shall be clearly labelled and appropriately segregated”*. Milltown object to the condition wording and request a change to the condition based on the following:

Grounds for Objection

Currently the only process at the Milltown Composting facility comprises a Type 8 process for the stabilisation of organic fines. The final outlet for all the stabilised organic fines from the process is at an engineered, lined and licensed landfill site.

The organic fines, which have been mechanically separated from municipal waste at a waste management facility are transferred to the Milltown site and are composted so that they can then be sent to landfill as biostabilised waste without the environmental risk associated with untreated municipal waste. The current process of maturation in large piles without significant physical separation (i.e., only visual markers between adjoining batches) has been completed at the Milltown site for the past number of years and while some batches have needed further processing, all batches have met the maturation criteria prior to being screened and transferred off site to a licensed landfill facility.

The physical separation of batches in the maturation shed No. 2 would only be required to prevent crossover of batches of varying maturation and are not as part of separation required to prevent cross contamination of compost material quality. Because all material is destined for an engineered landfill site the bio-stabilisation rather than the quality of the material is considered the most important factor. It is considered that maturity of the material will be controlled under Condition 8.17 of the licence where the biostabilised residual waste must meet the controls over odour and respiration activity (i.e., <7 mg O₂/g DM). Milltown feel that as long as they are processing only biostabilised residual waste and the material meets condition 8.17 of the licence then the use of visual markers rather than physical barriers should be permitted to continue.

For the past number of years Milltown have been completing sampling and stabilisation analysis (i.e., AT4) on 500 tonne batches to assess whether that material had reached the required maturation level and this will continue as per Condition 8.18 of Licence W0270-02. Milltown follow the EPA protocol for the “Sampling of Bio-Stabilised Residual Waste as set out in section 5.2 of the EPA ‘Protocol for the evaluation of biodegradable municipal waste sent to landfill’ and feel that by following this protocol that the maturation status of the material has been evaluated and can then be sent as stabilised residual waste to landfill. Milltown feel that due to the nature of the material (i.e., organic fines) being processed on site, and the final outlet of the material (i.e., licensed landfill), that the requirement for physical separation of batches within Shed 2 is excessive.

The licensee understands the requirement and need to complete separation of batches should the facility be processing organic material (i.e., brown bin organic waste material) for the production of a quality compost material for agricultural or horticultural use where the quality implications are significantly higher.

Licensee Request

Milltown request that as long as the facility is only processing organic fines at the facility where the final destination is to landfill that there not be a requirement for physical separation during maturation and that a visual separation of batches be allowed to continue. In the event that Milltown is processing brown bin waste for the production of a quality compost material then the facility will install physical barriers to separate batches to prevent potential quality or pathogen crossover impacts during the maturation process.

To accommodate the efficient storage of maturing material in Shed No. 2 Milltown propose the revision of the wording of Condition 8.6 of Licence W0270-02. The proposed revision is outlined below.

Proposed Condition Text Revisions As part of Licence Review W0270-02

Condition Ref	Current Licence Text	Proposed Revised Text
8.6	Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste and materials shall be clearly labelled and appropriately segregated.	<p>Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off.</p> <p>When completing Type 8 processing of biostabilised Waste the material within Shed 2 (maturation shed) shall be clearly labelled and the edges of batches should be delineated by visible markers.</p> <p>When processing brown bin waste for compost production the waste shall be clearly labelled and appropriately segregated</p>

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ATTACHMENT 1

Historical Results Tables

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Table A: Milltown Results for Biofilter Monitoring at Emission Point A2-1 for Air Extracted from Process Shed – 2016 -2018

Parameter	Biofilter Inlet – Concentrations in ppm						Biofilter Outlet - Concentrations in ppm					
	March 2016	August 2016	June 2017	Sept 2017	March 2018	July 2018	March 2016	August 2016	June 2017	Sept 2017	March 2018	July 2018
	Inlet 1 & 2	Inlet 1 & 2	Inlet 1 & 2	Inlet 1 & 2	Inlet 1 & 2	Inlet 1 & 2	Outlet	Outlet	Outlet	Outlet	Outlet	Outlet
<i>Ammonia</i>	10, 15	15, 10	20, 10	15, 15	10, 25	20, 15	<5	<5	<5	<5	<5	<5
<i>Hydrogen Sulphide</i>	<0.2, <0.2	<0.2, <0.2	<0.2, <0.2	<0.2, <0.2	<0.2, <0.2	<0.2, <0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
<i>Mercaptans</i>	<0.5, <0.5	<0.5, <0.5	<0.5, <0.5	<0.5, <0.5	<0.5, <0.5	<0.5, <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<i>Amines</i>	Both Negative	Both Negative	Both Negative	Both Negative	Both Negative	Both Negative	Negative	Negative	Negative	Negative	Negative	Negative

Licence W0270-01 Schedule B Limits – Ammonia – 50ppm, Hydrogen Sulphide – 5ppm, Mercaptans – 5ppm -

Table B: Milltown Results for Micro Organism Sampling At Sensitive Receptor: Upwind and Down Wind of the Site – 2016-2018

Parameter	2016			2017			2018		
	Sensitive Receptor	Upwind	Downwind	Sensitive Receptor	Upwind	Downwind	Sensitive Receptor	Upwind	Downwind
<i>Bacteria (cfu/m³)</i>	42 & 35	180 & 64	57 & 54	193 & 221	131 & 207	180 & 220	76 & 147	161 & 133	214 & 107
<i>Aspergillus fumigatus (cfu/m³)</i>	0 & 0	0 & 0	0 & 0	0 & 0	0 & 0	0 & 0	0 & 0	0 & 0	0 & 0

Table C – Milltown Composting Dust Deposition Results – 2016 - 2018

	2016			2017			2018		
	April	July	September	July	August	November	May	August	September
<i>D1 (mg/m²/day)</i>	91	188	17	212	334	88	205	249	75
<i>D2(mg/m²/day)</i>	80	299	61	212	71	64	264	126	176
<i>D3(mg/m²/day)</i>	24	123	100	194	170	164	59	305	50

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