Environmental Protection Agency 1 5 APR 2014

Ms. Noeleen Keavey, Administration Officer,

Office of Climate, Licensing and Resource Use.

Environmental Protection Agency,

PO Box 3000, Johnstown Castle,

Co. Wexford

15 / 04 / 2014

W0286-01

Dear Ms. Keavey,

I write to you in response to the letter received from the Agency dated 19/02/2014, with reference to a change in applicable rules for the application of a Waste Licence and in particular Regulation 9 of the EPA (Industrial Emissions) Regulations, 2013.

I have opted to furnish the Agency with the required additional information, and as such I hereby submit to the Agency

- 1 signed original
- 1 copy in hard copy format

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2 copies of all files™ electronic searchable PDF format on CD-ROM

Please, do not hesitate to contact me if you have any queries relating to the aforementioned submission.

Yours Sincerely,

Noel Madden Director



Unit 21, Duleek Business Park, Commons, Duleek, County Meath Tel: 041-686 2366 Fax: 041-686 2367 Email: admin@therecyclingvillage.ie Vat No: IE 6394465C Waste Permit No: WFP/MH/11/0005/01

Industrial Emissions Directive Licence Application – Further Information.

9 (2) (a) (i) the name, address and telephone number of the applicant and, if different, any address to which correspondence relating to the application should be sent and, if the applicant is a body corporate, the address of its registered or principal office,

Name*: The Recycling Village Ltd

Address: Unit 21, Duleek Business Park, Commons, Duleek, Co Meath

Tel: 041-6862366 Fax: 041-6862367

e-mail: admin@therecyclingvillage..ie

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (a) (ii) the location or postal address (including, where appropriate, the name of the relevant townland or townlands) of the premises to which the activity relates,

Name: The Recycling Village Ltd

Address*: Unit 21, Duleek Business Park, Commons, Duleek, Co Meath

Tel: 041-6862366 Fax: 041-6862367

e-mail: admin@therecyclingvillage.ie

* Include any townland

National Grid Reference (8 digit 4E,4N) E7052, N7694

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (a) (iii) the name of the planning authority in whose functional area the activity is or will be carried on, Consent of copyright on

Name: Meath County Council

Address: County Hall, Navan, Co Meath

Tel: 046-9097000 Fax: 046-9097001

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (a) (iv) in the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority, give the name of the sanitary authority in which the sewer is vested or by which it is controlled,

Name: Meath County Council

Address: County Hall, Navan, Co Meath

Tel: 046-9097000 Fax: 046-9097001

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (b) (i) in the case of an established activity, the number of employees and other persons working or engaged in connection with the activity on the date after which a licence is required and during normal levels of operation, or

The Recycling Village Ltd currently employs 30 staff.

9 (2) (b) (ii) in any other case, the gross capital cost of the activity to which the application relates,

The Recycling Village Ltd is an established activity. This section is not applicable.

9 (2) (b) (c) specify the relevant class or classes in the First Schedule to the Act of 1992 to which the industrial emissions directive activity relates,

The classes of activity in accordance with the First Schedule of the Act of 1992, as amended by the European Union (Industrial Emissions) Regulations 2013, to which the application relates are:

- 11.1 The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.
- 11.2 Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities;
- (d) Repackaging prior to submission to any of the other activities listed in paragraph 11.2 or 11.3;
- (f) Recycling or reclamation of inorganic materials other than metals or metal compounds
- 11.6 Temporary storage of hazardous waste (other than waste referred to in paragraph 11.5) pending any of the activities referred to in paragraph 11.2, 11.3, 11.5 or 11.7 with a total capacity exceeding 50 tonnes, other than temporary storage, pending collection, on the site where the waste is generated.

A copy of the new newspaper notice showing the above classes is attached (Appendix 1).

- 9 (2) (d) in accordance with section 87(1B)(a) of the Act of 1992 in the case where an application for permission for the development comprising or for the purposes of the industrial emissions directive activity to which the application for the licence relates is currently under consideration by the planning authority concerned or An Bord Pleanála, a written confirmation from the planning authority or An Bord Pleanála, as appropriate, of that fact together with either:
- (i) a copy of the environmental impact statement, 2 hard copies and 2 electronic copies or in such form as may be specified by the Agency, that was required to be submitted with the application for planning permission, or
- (ii) a written confirmation from the planning authority or An Bord Pleanála that an environmental impact assessment is not required by or under the Act of 2000,

This application relates to an existing facility. Planning permission has already been granted for the facility. An EIS is not required for this application. Letters from An Bord Pleanala and Meath County Council are attached (Appendix 2).

These details are supplementary to the original Waste Licence Application submitted to the EPA in August 2012.

- (e) in accordance with section 87(1B)(b) of the Act of 1992 in the case where permission for the development comprising or for the purposes of the industrial emissions directive activity to which the application for the licence relates has been granted, a copy of the grant of permission together with either:
- (i) a copy of the environmental impact statement, 2 hard copies and 2 electronic copies or in such form as may be specified by the Agency, that was required to be submitted with the application for permission, or
- (ii) a written confirmation from the planning authority or An Bord Pleanála that an environmental impact assessment was not required by or under the Act of 2000,

This application relates to an existing facility. Planning permission has already been granted for the facility. *Local Authority Planning File Reference No:* SA/30449 – 23/12/2003 & SA/60204 – 03/05/2006.

An EIS is not required for this application. Letters from An Bord Pleanala and Meath County Council are attached (Appendix 2).

These details are supplementary to the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (f) specify the raw and ancillary materials, substances, preparations, fuels and energy which will be produced by or utilised in the activity,

The main raw materials used by The Recycling Village and the estimated annual quantities of raw materials used and stored at the facility are tabulated below.

Material	Nature of Use	Annual Use	Stored
Electricity	Site Power	165600 kWh	0
Water	Domestic/potable	600m ³	0
Diesel	Forklift	2,700 litres	0
Baling Wire	Baling Plastic	120 units	4 units
Shrink Wrap	Wrapping	360 units	12 units
	Consignments		
IBC Bags	Storing/Shipping	4200 units	1000 units
	Consignments		
Pallets	Storing/Shipping	1200 units	100 units
	Consignments		
Strapping	Securing	12 units	1 unit
	Consignments		
Air Extraction	Filtering air emissions	84 units	8 units
Filters			

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These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (g) describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems, and operating procedures for the activity,

The Recycling Village Ltd provides a recycling service for WEEE including TV monitors, PC monitors, mixed WEEE (eg. hairdryers, toaster, kettles etc), lead acid and other batteries. The above WEEE is generated at civic amenity sites and dedicated WEEE collection points as part of the WEEE compliance schemes. The company has also a number of business customers and arranges for the collection and delivery of a similar type material.

The WEEE is delivered to The Recycling Village Ltd facility by licensed third party contractors. The facility does not accept deliveries of WEEE from the general public. TV and PC monitors are manually processed and dismantled to separate the display unit and outer unit/case. The display units are segregated into their component parts e.g panel and funnel glass and processed separately through specialised glass cleaning equipment. The recovered fractions include glass, metal and plastics. Flat panel displays (FPD's) are similarly manually disassembled into recyclable streams including; plastic, cables, circuit boards, steel, aluminium, plasma glass and LCD screen. These materials are segregated, bulked and stored on site prior to transport off site for further processing and recycling. The Recycling Village Ltd also dismantles and shreds mixed WEEE in order to recover additional recyclable materials including metals and plastics. The equipment used to segregate and recycle the mixed WEEE fraction includes a small shredder, conveyor and magnet. A map showing the facility/process layout is presented in Appendix 9.

Batteries are sorted, segregated and repackaged prior to transport off site for further processing and recycling. The Recycling Village Ltd also provides a secure data destruction and recycling service for hard drives, data storage & IT equipment. The above operations increase the recycling rate of WEEE entering the facility and help to achieve National WEEE recycling targets.

The Recycling Village Ltd has invested over €500,000 in recent years to install equipment, infrastructure, processes and procedures to meet and exceed BAT requirements eg. Enclosed dismantling units, extraction and filtration equipment, shredders, conveyors and emissions monitoring infrastructure. The Recycling Village Ltd has also invested in developing and implementing a certified ISO 14001 Environmental Management System (EMS) (Appendix 3). These measures help to ensure that The Recycling Village Ltd continues to produce a high quality recyclable product in a manner that provides a safe and comfortable working environment for employees and helps to protect the environment. A copy of the EMS procedures contents is attached (Appendix 4). Full procedures are available on site for review and inspection if required.

These details are supplementary to the original Waste Licence Application submitted to the EPA in August 2012.

9 (2) (h) indicate how the requirements of section 83(5)(a)(i) to (v) and (vii) to (xa) of the Act of 1992 shall be met, having regard, where appropriate, to any relevant specification issued by the Agency under section 5(3)(b) of that Act or any applicable best available techniques (BAT) conclusions adopted in accordance with Article 13(5) of the Industrial Emissions Directive and the reasons for the selection of the arrangements proposed,

The Environmental Protection Act 1992, as amended by Section 83(5) (a) (i) to (v) and (vii) to (xa) of The Protection of the Environment Act 2003, states that, the Agency shall not grant a licence or revised licence for an activity—

- (a) unless it is satisfied that—
 - (i) any emissions from the activity will not result in the contravention of any relevant air quality standard specified under section 50 of the Air Pollution Act 1987, and will comply with any relevant emission limit value specified under section 51 of the Air Pollution Act 1987,
 - Air emission stack monitoring surveys for particulates and heavy metals, have been carried out at the current facility by The Recycling Village Ltd (Appendix 5). Dust deposition monitoring surveys as required by the existing waste permit, show compliance with the waste permit conditions (Appendix 6). The Recycling Village Ltd is committed to complying with all relevant air quality standards or conditions imposed by the EPA.
 - (ii) any emissions from the activity will comply with, or will not result in the contravention of, any relevant quality standard for waters, trade effluents and sewage effluents and standards in relation to treatment of such effluents prescribed under section 26 of the Local Government (Water Pollution)

 Act 1977.

The recycling operation that is carried out at the facility is a dry process that does not generate effluent emissions. However, yard run off discharges from the site to a local authority surface water drain via a three stage interceptor sump. Interceptor sump effluent monitoring surveys as required by the existing waste permit show compliance with the permit conditions (Appendix 7), with the exception of ammonia (see section 9.2 i below). A yard material storage management plan (Appendix 8) and material storage procedures have been implemented which help to control and manage rain water contamination. The Recycling Village Ltd is committed to complying with all relevant effluent quality standards or conditions imposed by the EPA.

(iii) any emissions from the activity or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of, any relevant standard including any standard for an environmental medium prescribed under regulations made under the European Communities Act 1972, or under any other enactment,

Environmental emissions monitoring surveys that have been carried out at the current facility operated by The Recycling Village Ltd as required by the existing waste permit conditions, have shown that there are no adverse environmental impacts from the facility. The Recycling Village Ltd is committed to complying with all relevant emissions quality standards or conditions imposed by the EPA.

(iv) any noise from the activity will comply with, or will not result in the contravention of, any regulations under section 106,

Site boundary noise emissions monitoring surveys that have been carried out at the current facility operated by The Recycling Village Ltd as required by the existing waste permit conditions, have shown that there are no noise nuisance conditions beyond the site boundary (Appendix 6).

(v) any emissions from the activity will not cause significant environmental pollution,

Environmental emissions monitoring surveys that have been carried out at the current facility operated by The Recycling Village Ltd as required by the existing waste permit conditions, have shown that there are no adverse environmental impacts from the facility.

(vi) the best available techniques will be used to prevent or eliminate or, where that is not practicable, generally to reduce an emission from the activity

See BAT table/section below.

(vii) having regard to Part III of the Act of 1996, production of waste in the carrying on of the activity will be prevented or minimised or, where waste is produced, it will be recovered or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment

The Recycling Village Ltd is a specialist WEEE and battery recycling company. Approximately 95% of all materials handled at the facility, including packaging waste is recycled. The Recycling Village Ltd is actively researching new markets for all segregated components in an attempt to increase the recycling rate as high as possible.

The waste generated at the facility includes floor sweepings, contamination from consignments e.g. paper, plastic, cardboard and wood. This material is sent to Indaver for heat recovery. Wood waste is sent to local waste management companies for recycling.

(viii) energy will be used efficiently in the carrying on of the activity,

The Recycling Village Ltd has carried out an initial energy audit as part of the site EMS (Appendix 10). An energy efficiency project (Env 6) has been established as part of the sites EMS (Appendix 11). Energy efficiency measures have been implemented at the facility including; PIR detectors on lights and heating controls

(ix) necessary measures will be taken to prevent accidents in the carrying on of the activity and, where an accident occurs, to limitally consequences for the environment and, in so far as it does have such consequences, to remedy hose consequences,

The Recycling Village Ltd has developed and implemented a site Emergency Response Plan (ERP) in accordance with the requirements of the existing waste permit.

The site ERP describes the measures including procedures, to minimise the impact on the environment of a fire, accidental emission, spillage or emergency. In the event of an emergency or process equipment breakdown, all site operations would stop and equipment turned off. There would be no expected significant environmental emissions to air, ground, sewer, surface water etc.

In addition, The Recycling Village Ltd has developed and implemented an Environmental Management System (EMS) at the site that has been certified in accordance with ISO 14001. In conjunction with the EMS, a health and safety system has been developed consisting of a series of fire and risk assessments. Regular staff training sessions are carried out and records maintained

(x) necessary measures will be taken upon the permanent cessation of the activity (including such a cessation resulting from the abandonment of the activity) to avoid any risk of environmental pollution and return the site of the activity to a satisfactory state,

Upon cessation of the site activities, The Recycling Village Ltd would strive to achieve a clean closure of the site prior to surrendering the Waste licence. As the facility is located within a purpose built industrial estate, it is envisaged that the site, post closure would be used for further commercial/industrial use.

The scope of the closure audit would be agreed beforehand with the Agency as detailed in section r below

In complying with the above requirements, The Recycling Village Ltd has considered appropriate technology and relevant BAT including recommendations as detailed in the following documents and guidelines;

Document/Guideline	BAT Statement/ Requirement	Compliance Statement
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery	Suitable Location.	The Recycling Village Ltd is located in a purpose built facility in an established Industrial Estate.
BREF on Waste Treatments Industry		
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry	The facility will not cause environmental pollution.	The Recycling Village Ltd operates the waste facility under an existing Waste Permit issued by Meath County Council. Regular emissions monitoring has shown that the facility does not cause significant environmental pollution (Appendices 5, 6, 7).
BREF on Emissions from Storage	D 11: M	TD1 00 11 X711 X 11 1 1 1
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery	Facility Management is a critical element in ensuring that emissions are minimised.	The Recycling Village Ltd has developed and implemented an Environmental Management System (EMS) that is certified to ISO 14001 (Appendix 3). The EMS and site environmental team ensure
BREF on Waste Treatments Industry	Environmental controls are in place. Waste acceptance, waste	that the facility is operated to identify, control and manage environmental impacts
BREF on Emissions from Storage	cot itely or	in order to reduce potential environmental pollution.
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry BREF on Emissions from Storage	Waste acceptance, waste handling, waste processing, waste storage are important operational matters that have a direct effect upon the pollution/nuisance potential of the facility.	As part of the facilitys' certified ISO 14001 EMS, The Recycling Village Ltd has developed and implemented a series of site operating procedures in collaboration with a staff internal training progamme (Appendix 4). These management measures help to ensure that the facility is operated in an appropriate manner by trained staff in order to manage environmental impacts and
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry BREF on Emissions from Storage	Air Emissions	reduce potential environmental pollution. Dust (particulate) abatement filters are installed on dismantling unit prior to stack discharge. Annual stack emissions and site boundary dust deposition monitoring is carried out. Internal occupational dust monitoring survey are also carried out (Appendix 12).
REF on The General Principles of Monitoring		

Document/Guideline	BAT Statement/ Requirement	Compliance Statement
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry BREF on Emissions from Storage REF on The General Principles of Monitoring	Effluent Emissions	The recycling process is a dry process. Yard run off is discharged to Local Authority surface water drain via a three stage interceptor sump. Quarterly effluent monitoring is carried out (Appendix 7). A yard storage management plan has been established to ensure that all segregated recyclable materials are appropriately stored and identified (Appendix 8). An assessment of the site discharge on the local river has shown no significant impact
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry REF on The General Principles of Monitoring	Noise Emissions Noise Emissions	on the river from the site (Appendix 13). Dismantling is carried out inside an enclosed, ventilated unit. Rubber mats are used to dampen noise emissions. Annual site boundary noise monitoring is carried out (Appendix 6).
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry BREF on Emissions from Storage REF on The General Principles of Monitoring	Soil & Groundwater Contamination For printing Consert of Consert	The recycling process does not generate effluent emissions. The storage yard is covered in thick concrete. Segregated materials are stored inside the facility building, in external storage containers and under cover. Fuel for site equipment is stored in covered bunded containers. These measures help to reduce the generation of contaminated yard run off. A soil and groundwater baseline survey has been carried out (Appendix 14).
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Waste Treatments Industry BREF on Emissions from Storage	Housekeeping/Litter/Odour/ Nuisance/Yard sweeping/ Vermin	As part of the facilitys' certified ISO 14001 EMS, The Recycling Village Ltd has developed and implemented a housekeeping and nuisance control operating procedure – EMS 11 06 (Appendix 4). These management measures help to ensure that the facility does not generate nuisance conditions.
EPA: Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery BREF on Energy Efficiency	Energy Efficiency	An initial energy audit has been carried out as part of the site EMS. An energy efficiency project has been established as part of the sites EMS (Appendix 10, 11). Energy efficiency measures have been implemented at the facility including; PIR detectors on lights and heating controls.

9 (2) (i) give particulars of the source, nature, composition, temperature, volume, level, rate, method of treatment and location of emissions, and the period or periods during which the emissions are, or are to be, made,

Air Quality: Air exhaust emissions monitoring for particulates and a suite of heavy metals including; Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Antimony, Nickel, Thallium, Vanadium, Phosphorous, Mercury and Total Metals is carried out annually at air emission point Al and analysed by an accredited laboratory. The latest air emissions report dated 4th Sept 2013 is attached (Appendix 5). The summary emission results are;

Particulates – 1.92 mg/Nm³ Total Metals – 0.4943 mg/Nm³

External dust deposition monitoring is carried out on an annual basis as required by the existing Waste Permit. Dust deposition levels are below the Waste Permit limit of 350mg/m³/day. A copy of the 2013 annual dust deposition report dated April 2013 is attached (Appendix 6).

Internal occupational dust monitoring is carried out on an annual basis for heavy metals and respirable dust. Concentrations are below published occupational health and safety guidelines. A copy of the 2013 occupational dust monitoring report is attached (Appendix 12).

Yard Water run Off: The Recycling Village Ltd takes quarterly grab samples of the yard run off from the final chamber of the interceptor sump for analysis by a third party laboratory for the following parameters; pH ,Suspended solids, BOD, COD, Ammonia, Mineral Oils, Total Petroleum Hydrocarbons, VOC's, Arsenic, Lead, Iron, Cadmium, Chromium, Glycol. Effluent results show that concentrations are within the Waste Permit levels, with the exception of ammonia. A copy of the 2013 effluent analysis results are attached (Appendix 7).

The Recycling Village Ltd has had numerous discussions with Meath County Council regarding the low discharge limit that has been set for Ammonia ie. 0.065mg/l. The EPA BAT emission level for ammonia is 10mg/l (EPA BAT Guidance Note for the Waste Sector). Meath County Council has indicated that the ammonia level in the existing waste permit was set too low and should be altered to reflect a more realistic and achievable level.

Noise Emissions: Annual site boundary noise readings are taken in accordance with ISO 1996/1 'Acoustics – Description & Measurement of Environmental Noise' using a sound level meter. Noise results show that noise levels at some boundary locations exceed the Waste Permit level of 55 dB(A). However, due to the location of the site in a purpose built industrial estate, noise emissions from the site are unlikely to have a significant negative impact on sensitive locations beyond the site boundary. A copy of the 2013 annual noise report dated April 2013 is attached (Appendix 6).

A summary of the site emissions monitoring programme is tabulated below. A site map showing the sampling locations is attached (Appendix 15).

Emission	Source	Nature	Composition & Quantity	Period of Emission
Air – Point	Display	Air exhaust	Particulates & Heavy Metals.	Approx 8 hours per
Source (A1)	Dismantling Areas	emission	See AXIS Emissions Report	day
			dated 3 rd Sept 2013	
Dust	Yard/Traffic	Dust	$Dust < 350 mg/m^2/day$	Continuous
Deposition		Deposition		
(D1-D4)				
Yard run off	Yard/Rainwater	Water	Water quality as above and per	During rainfall
(SW1)			Waste Permit conditions	
Noise	Process	Noise	dBA (Laeq) - Range approx 48	Approx 8 hours per
(N1-N4)			-65dB(A)	day

9 (2) (j) identify monitoring and sampling points and outline proposals for monitoring emissions and the environmental consequences of any such emissions,

The Recycling Village Ltd propose the following Emissions Monitoring Programme.

Emission	Parameter	Location	Analytical technique	Frequency
Air – Point	Particulates &	Display	Flow Rates – EN 13284-1	Annually
Source (A1)	Heavy Metals as	Dismantling	Particulates – EN 13284-1	
	detailed above	Area	Metals – EN 14385	
			Mercury – EN 13211	
Dust	Dust Deposition	4 x boundary	Bergerhoff method & laboratory	Annually
Deposition		locations	analysis	
(D1-D4)				
Yard run off	As detailed above	Yard interceptor	Grab sample & laboratory	Quarterly
(SW1)	& Attachment F	sump	analysis	
	of Waste Licence			
	Application			
Noise	dBA (Laeq)	4 x site	Noise level meter	Annually
(N1-N4)		boundary		
		locations		
Groundwater	Suite of organics	3 x site	Grab sample & laboratory	Bi Annually
(BH1-BH3)	and heavy metals	boreholes	analysis	
	as per attached	(Figure 1 in Soil		
	baseline soil &	& Groundwater		
	groundwater	Baseline Report)		
	report			

The results of the above sampling programmes will be compared against ficence and relevant published environmental criteria in order to assess the environmental consequences of the emissions.

Results to date show that none of the emissions from the facility have any significant environmental consequences.

A site map showing the above sampling locations is attached. The groundwater monitoring locations are shown on Figure 1 in the attached Soil & Groundwater Baseline Report.

9 (2) (k) (i) details, and an assessment, of the impacts of any existing or proposed emissions on the environment as a whole, including on an environmental medium other than that or those into which the emissions are, or are to be, made,

Environmental emissions monitoring surveys that have been carried out at the Recycling Village facility as required by the existing waste permit conditions, have shown that there are no adverse environmental impacts from the facility.

In September 2013, The Recycling Village Ltd took a series of water and sediment samples from the River Nanny in order to assess the potential impact of the yard surface water run off on the river. The results show that the lead levels in the water and sediment samples taken from both upstream and downstream of the river discharge point were below published environmental quality standards. Consequently, the results of the survey show that run of from The Recycling Village Ltd yard has no negative impact on the quality of the water or sediment of River Nanny. A copy of the assessment report is presented in Appendix 13.

In order to demonstrate that all site emissions comply with relevant standards and limits, The Recycling Village Ltd has implemented an emissions monitoring programme at the facility in accordance with the existing facility waste permit. The Recycling Village Ltd will implement an updated emissions monitoring programme at the facility as directed by the Agency and as proposed above and in Attachment F of the original Waste Licence Application.

Where emissions are found to be above relevant standards, The Recycling Village Ltd will take all necessary steps to identify the source/cause of the elevated emissions and take all necessary and reasonable steps to reduce emissions to comply with relevant standards, including implementation of BAT and taking into consideration other Agency guidelines and relevant sources of information.

9 (2) (k) (ii) details of the proposed measures to prevent or eliminate, or where that is not practicable, to limit, reduce or abate emissions.

The main abatement and control systems at The Recycling Village Ltd facility include;

- extensive concrete storage yard to prevent potential soil and groundwater pollution from spillages and leaks
- secure storage facilities
- spillage kits
- interceptor sump with shut off valve and alarm
- newly installed extraction vents and filters on the WEEE disassembly lines
- fire extinguishers
- site EMS, written procedures and staff training
- Emergency Response Plan / Emergency Response Team / Site Contingency Plan

There are no other abatement, recovery or treatment systems at the facility.

The above details supplement information provided in the original Waste Licence Application submitted to the EPA in August 2012.

(l) describe in outline the main alternatives to the proposed technology, techniques and measures which were studied by the applicant,

The Recycling Village Ltd is an established waste management company specialising in the dismantling, processing and recycling of waste electrical and electronic equipment (WEEE), in particular displays from Televisions, monitors and batteries.

The Recycling Village was established by Director Noel Madden in 2004 in response to the WEEE Directive, 2003. Noel had 15 years experience of operating and managing successful waste management & recycling businesses and prior to establishing The Recycling Village Ltd, Noel was a founder of waste management company Kerbside Dublin.

Prior to establishing The Recycling Village Ltd, Mr Madden visited recycling facilities throughout Europe and carried out extensive research into the existing technology and processes used to recycle WEEE across the world. The technology, techniques and processes investigated included; laser cutting, water jet cutting, saw cutting, hot wire and shredding. These processes are dirty, generate emissions and produce dangerously sharp glass.

Based on this research, Mr Madden developed and established an alternative, environmentally benign dry glass cleaning process. The glass cleaning process involves removing the zinc/phosphor coating that covers the display glass to produce clean, clear glass. The process does not use water or generate effluent and produces clean, smooth glass nuggets that are safe to handle, store and transport prior to recycling. Processing dust is collected and abatement through a HVAC filtered vacuum treatment system.

Apart from developing an alternative display glass cleaning processes, The Recycling Village Ltd has also developed an environmentally safe way to dismantle and recycle flat screen displays. This process involves the manual deconstruction of flat screen displays and removal of mercury bearing tubes inside an enclosed dismantling unit that is complete with mercury abatement via extraction and filters. Mercury monitoring is carried out of the stack emissions & occupational Mercury Vapour Monitoring (Appendix 12) is carried out in accordance with EMS Procedure 1108.

The WEEE recycling technology, techniques, measures and management system that have been developed and implemented by The Recycling Village Ltd are considered to be Best Available Technology in this specialized waste recycling sector.

(m) describe the condition of the site of the installation,

Environmental emissions monitoring surveys that have been carried out at the current facility operated by The Recycling Village Ltd as required by previous waste permit conditions, have shown that there are no adverse environmental impacts from the facility. Copies of recent environmental monitoring reports are attached in he appendices and summarized in this document. This current information provides additional data to supplement the details contained in Attachment E of the original Waste Licence Application submitted to the EPA in August 2012.

The waste activities that will be carried out under the proposed Waste Licence as detailed in the original waste licence application will be the same as those activities that are currently carried out by The Recycling Village Ltd.

Consequently, there will be no expected adverse environmental impacts from the facility. However, The Recycling Village Ltd will carry out emissions monitoring and take all necessary steps as detailed in this document and in the original application to ensure that there is no adverse environmental impact caused by the proposed operations at the facility.

(n) provide, when requested by the Agency, in the case of an activity that involves the use, production or release of relevant hazardous substances (as defined in section 3 of the Act of 1992) and having regard to the possibility of soil and groundwater contamination at the site of the installation, a baseline report in accordance with section 86B of the Act of 1992,

A baseline soil and groundwater survey has been carried out at the facility. The results of the survey show that there is no soil or groundwater contamination at the site. The baseline report dated April 2014 is attached (Appendix 14).

(o) specify the measures to be taken to comply with an environmental quality standard where such a standard requires stricter conditions to be attached to a licence than would otherwise be determined by reference to best available techniques,

The Recycling Village Ltd contends that existing emissions monitoring results, operating processes, procedures, equipment and the ISO 14001 certified EMS shows that the facility complies with current and relevant environmental quality standards. However, where environmental quality standards require stricter conditions to be attached to a licence than would otherwise be determined, The Recycling Village Ltd will take all necessary and reasonable steps to identify, implement and develop feasible solutions. This process will be driven and managed by the facility environmental management team through the EMS - taking into account relevant standards, BAT, Agency guidelines, technological advances and other sources of relevant information.

(p) describe the measures to be taken for minimising pollution over long distances or in the territory of other states,

There is one direct air emission point from the facility (ie. A1). Annual emissions monitoring is carried out of this stack for; Particulates, Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Antimony, Nickel, Thallium, Vanadium, Phosphorous, Mercury and Total Metals. The latest air emissions report dated 4th Sept 2013 is attached (Appendix 5). The summary emission results are;

Particulates – 1.92 mg/Nm³ Total Metals – 0.4943 mg/Nm³

The above air emission concentrations indicate that air emissions from the facility are unlikely to cause pollution over long distances or in the territory of other states.

However, The Recycling Village Ltd does send clean, segregated materials to other countries for further processing or recycling. The materials that are sent to other states is 100% recyclable and free from contamination. The Recycling Village Ltd ensures that all consignments are dispatched in accordance with TFS notes and contain all relevant documentation in accordance with transport Regulations and the facility Environmental Management System. Furthermore, The Recycling Village Ltd carries out due diligence assessments and audits on all waste hauliers, transporters and final destination facilities to ensure that each party has appropriate and current waste licences, permits and insurances. These measures will help to ensure that materials sent from the facility are recycled and do not cause pollution or environmental issues in other countries.

(q) describe the measures to be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages,

As part of the existing site Waste Permit WFP-MH-11-0005-01, clause 9.1 requires The Recycling Village Ltd to develop and implement a site Emergency Response Plan (ERP).

A copy of the site ERP which has been submitted to Meath County Council, is presented in Attachment F of the original Waste Licence Application.

In addition, The Recycling Village Ltd has developed and implemented an Environmental Management System (EMS) at the site that has been certified in accordance with ISO 14001. In conjunction with the EMS, a health and safety system has been developed consisting of a series of fire and risk assessments. The EMS and risk assessments will be used to review the existing ERP and update as required.

The existing site ERP describes the measures including procedures, to minimise the impact on the environment of a fire, accidental emission, spillage or emergency. In the event of an emergency or process equipment breakdown, all site operations would stop and equipment turned off. There would be no expected significant environmental emissions to air, ground, sewer, surface water etc.

The ERP also outlines the provisions that have been made for response to emergency situations outside of normal working hours, i.e. during night-time, weekends and holiday periods.

Fire extinguishers, spill kits and first aid kits are located throughout the facility. Regular staff training sessions are carried out and records maintained.

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

(r) describe the measures to be taken on and following the permanent cessation of the activity or part of the activity to avoid any risk of environmental pollution and to return the site of the activity to a satisfactory state or the state established in the baseline report if such is required under section 86B of the Act of 1992,

Upon cessation of the site activities, The Recycling Village Ltd would strive to achieve a clean closure of the site prior to surrendering the Waste licence. As the facility is located within a purpose built industrial estate, it is envisaged that the site, post closure would be used for further commercial/industrial use.

The scope of the closure audit would be agreed beforehand with the Agency but could include the following;

'identify the decommissioning, rendering safe or removal for disposal/recovery, of any soil, sub-soils, buildings, plant or equipment, or any waste materials or substances of any other matter contained therein or thereon, that may result in environmental pollution. The audit should also confirm whether any measures are necessary on-site to avoid any risk of environmental pollution.'

The closure audit report would be based on refevant EPA guidance and publications eg.

Guidance on Environmental Liability Risk Assessment, Residuals Management Plans & Financial Provision.'

OEE Methodology for Determining Enforcement Category of Licences.

Specific site closure actions may include;

- Relocation, sale & disposal of plant, equipment, machinery, raw materials, product and stock
- Disposal of all site waste (liquid and solid)
- Clean out drainage system and interceptor
- CCTV survey of site drainage system
- Soil and groundwater sampling and analysis (if required)
- Securing the site

It is envisaged that the conditions of the Waste licence will require The Recycling Village Ltd to establish a bond or insurance policy to cover the costs of decommissioning activities following cessation of the site activities.

The Recycling Village Ltd confirms that it will have in place the necessary financial arrangements to fully fund the site closure plan.

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

(s) describe the arrangements for the prevention of waste in accordance with Part III of the Act of 1996, and where waste is generated by the installation, how it will be in order of priority in accordance with section 21A of the Act of 1996, prepared for re-use, recycling, recovery or where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment,

The Recycling Village Ltd is a specialist WEEE and battery recycling company. Approximately 95% of all materials handled at the facility, including packaging waste is recycled. The Recycling Village Ltd is actively researching new markets for all segregated components in an attempt to increase the recycling rate as high as possible.

The Recycling Village Ltd is fundamental in assisting Ireland to meet its recycling commitments under the WEEE Directive.

The waste generated at the facility includes floor sweepings, contamination from consignments e.g. paper, plastic, cardboard and wood. This material is sent to Indaver for heat recovery. Wood waste is sent to local waste management companies for recycling.

These details supplement the previous information that was included in the original Waste Licence Application submitted to the EPA in August 2012.

(t) specify, by reference to the relevant European Waste Catalogue codes as prescribed by Commission Decision 2000/532/EC of 3 May 20002, the quantity and nature of the waste or wastes produced or to be produced by the activity, or the quantity and nature of the waste or waste accepted or to be accepted at the installation,

The Recycling Village Ltd currently handles and processes upto 6,000 tornes of WEEE. This is forecst to increase to upto 15,000 tonnes. WEEE is dis-assembled, separated and segregated into various material streams for further recycling and processing at facilities off site in Ireland and abroad of the control of the con

The type, quantity and nature of the waste accepted and to be accepted at the facility are shown in the table below.

WASTE	EWC & DESCRIPTION FOR THE PROPERTY OF THE PROP	Tonnes Per Annum (Existing)	Tonnes Per Annum (Proposed)	Disposal/ Recycling
Batteries	20 01 33* Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	1,500	3,500	Recycling
Batteries	20 01 34 Batteries and accumulators other than those mentioned in 20 01 33	200	500	Recycling
WEEE	16 02 13* Discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 to 16 02 12	400	1,000	Recycling
WEEE	16 02 15* Hazardous components removed from discarded equipment	200	500	Recycling
WEEE	20 01 35* Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 containing hazardous components.	2,900	7,000	Recycling
WEEE	16 02 14 discarded equipment other than those mentioned in 16 02 09 to 16 02 13 16 02 16 components removed from discarded equipment other than those mentioned in 16 02 15 20 01 36 discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	800	2,500	Recycling
	TOTAL	6,000	15,000	Recycling

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

(u) state whether the activity consists of, comprises, or is for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2006 (S.I. No. 74 of 2006) apply,

Following a review of the European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2006 (SI No. 74 of 2006), The Recycling Village Ltd confirms that none of the named substances in The First Schedule, Part 1 of the Directive are used at the facility.

Furthermore, The Recycling Village Ltd confirms that the quantity of substances stored at the facility are less than the maximum threshold quantities as detailed in The First Schedule, Part 2 of the Directive.

Consequently, the European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2006 (SI No. 74 of 2006) do not apply to activities carried out at this facility.

These details are the same as in the original Waste Licence Application submitted to the EPA in August 2012.

(v) describe, in the case of an activity which gives rise, or could give rise, to an emission containing a hazardous substance which is discharged to an aquifer and is specified in the Annex to Council Directive 80/68/EEC of 17 December 19793 on the protection of groundwater against pollution caused by certain dangerous substances, the arrangements necessary to comply with the said Council Directive,

The Recycling Village Ltd does not discharge to an aquifer. This section is not applicable.

(w) include a non-technical summary of information provided in relation to the matters specified in subparagraphs (c) to (x) of this paragraph,

A non - technical summary is attached (Appendix 17).

(x) include any other information required under Article 11 of the Industrial Emissions Directive.

Article 11 of the Industrial Emissions Directive refers to the requirements of an environmental impact statement and compliance with Article 94 of the Planning and Development Regulations, or with any provision amending or replacing the said article 94.

An environmental impact statement is not required as part of this application, therefore this section is not applicable.