ATTACHMENT I
EXISTING ENVIRONMENT & IMPACT OF THE ACTIVITY

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.

The waste activities that will be carried out under the proposed Waste Licence as detailed in this 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 take the following steps to ensure that there is no adverse environmental impact caused by the proposed operations at the facility.

I.1 Assessment of Atmospheric Emissions.

There are two point emission sources to atmosphere from the facility as shown on the Site Emissions Monitoring Plan Ref: 12039-LA-05, ie;

- A1 - CRT dismantling line (CRT)
- A2 - Flat panel dismantling line (FPD)

These point sources have only recently been installed and are currently being commissioned. Consequently there has been no testing carried out of the emissions from these extraction ducts as part of this Waste Licence application. It is expected that emissions testing from these vents will be carried out as part of the Waste Licence requirements.

However, prior to installing the extraction vents, a series of occupational dust sampling surveys were carried out at the facility.

Monitoring of personal exposure to total inhalable dust and metals was carried out using calibrated personal sampling pumps with the IOM sampling head located in the breathing zone ie. attached to the lapel or collar. Sampling was carried out on selected employees during activities that that were representative of those carried out throughout a typical day.

The filters were analysed by a third party environmental laboratory for total inhalable dust and the following heavy metals that were deemed appropriate to the WEEE recycling activities - barium, cadmium, copper, iron, lead, mercury, nickel, phosphorus, zinc and chromium VI.

The results as shown in Attachment E, were compared to the 8 hour time weighted average Occupational Exposure Limit Values (OELVôs) as detailed in the Health & Safety Authority 2010 Code of Practice for the Safety, Health & Welfare at Work (Chemical Agents) Regulations 2001 (SI No. 619 of 2001).

The concentrations of total inhalable dust and the various metals were all well below the published OELVôs.

Consequently, based on the results of the occupational dust surveys, it is concluded that there are no respirable occupational health & safety issues in relation to the substances tested for. Therefore, the concentration of dust and heavy metals that will be discharged to atmosphere from point sources A1 and A2 is likely to be insignificant. There are no odours emitted from the facility.

In conclusion, emissions of the main polluting substances (as defined in the Schedule of S.I. 394 of 2004) to the atmosphere from The Recycling Village Ltd are unlikely to have a significant impact or impair the environment.

I.2 Assessment of Impact on Receiving Surface Water.

The Recycling Village Ltd do not discharge effluent to surface water. Consequently, this section is not applicable.

I.3 Assessment of Impact of Sewage Discharge.

There are no process effluent emissions from the facility to sewer.

There are effluent emissions from the site toilets, canteen and staff changing rooms to the Meath County Council local authority foul sewer as shown on Site Drainage Plan Ref: 12039-LA-01.

The yard run off water drains to an interceptor prior to discharge to the Meath County Council local authority foul sewer as shown on Site Drainage Plan Ref: 12039-LA-01.

The above sewer discharges are controlled by the existing site Waste Permit, WFP-MH-11-0005-01 issued by Meath County Council.

As part of the existing Waste Permit, The Recycling Village Ltd take quarterly samples of the effluent from the final chamber of the interceptor sump for analysis by a third party laboratory.

The results of previous yard run off analyses are presented in Attachment E and show that there are no significant concentrations of chemicals that could cause damage to the sewer or effluent treatment process.

The following table compares the quality of the samples of the yard run off water against the limits set down in the EC Drinking Water Regulations SI 278 of 2007.

Parameter	**Sept 2011**	**Oct 2011**	**Feb 2012**	**June 2012**	**Drinking Water Regs SI 278 of 2007**	**Council Directive 80/68/EEC**
BOD (mg/l)	10.3	3.03	9.13	3.33	5	No
PH	7.76	7.48	7.76	7.88	6.5-9.5	
Arsenic (ug/l)	0.985	0.672	0.835	0.456	10	No
Cadmium (µg/l)	1.61	4.01	1.94	4.25	5	List I
Chromium (µg/l)	3.71	8.55	<0.22	7.84	50	List II
Iron (mg/l)	<0.019	0.0583	<0.019	0.105	0.2	
Lead (µg/l)	18.2	45	25.5	82	25	List II
Pesticides (ug/l)	<0.01	<0.01	<0.01	<0.01	0.03	List II

The above table shows that with the exception of lead in 2 samples, the quality of the yard run off water complies with comparable limits as set down in the EC Drinking Water Regulations SI 278 of 2007.

The Recycling Village Ltd is currently investigating the potential cause of the elevated concentration of lead in the most recent effluent sample and will review and update the site EMS procedures as appropriate.

Consequently the nature and quality of the yard effluent run off from the site to sewer is unlikely to have a significant negative impact on the sewer or effluent treatment process.

In conclusion, emissions of the main polluting substances (as defined in the Schedule of S.I. 394 of 2004) to the sewer from The Recycling Village Ltd are unlikely to have a significant impact or impair the environment.

I.4 Assessment of Impact of Ground/Goundwater Emissions.

The storage yard at The Recycling Village Ltd is covered with concrete to prevent potential soil and groundwater pollution from potential spillages and leaks.

The soil composition in the vicinity of the site is comprised of Limestone till (Carboniferous), lake sediments undifferentiated, shales and sandstones till (Namurian).

The bedrock is classified as marine shelf facies; limestone & calcareous shale from the age bracket Palaeozoic, Carboniferous, Mississippian.

The bedrock aquifer is classified as Regionally Important Aquifer - Karstified (diffuse).

There are no direct emissions to ground or groundwater from the facility. There are no groundwater monitoring boreholes at the site.

The site interceptor sump has been emptied and inspected by a third party and declared intact (Attachment E).

In summary, the existing concrete yard, interceptor sump and site EMS emergency & spillage procedures will help to protect the soil and groundwater underneath the site from potential pollution from spills and activities taking place at the facility.

Furthermore, based on the results of the yard water run off analysis, it is concluded that yard run off water from the site is uncontaminated and should not have any significant impact on the soil and groundwater underneath the site.

I.5 Ground and/or Goundwater Contamination.

The site is a purpose built industrial facility that was built in 2005 on a green field site.

Prior to occupation by The Recycling Village Ltd, the site was used as a light industrial, steel fabrication facility.

The site is fully covered with concrete and although there have been no soil or groundwater investigations carried out as part of this Waste Licence application, based on the known recent development, the previous use of the site and the inspection of the interceptor sump, it is expected that there is no significant soil or groundwater contamination below the site as a result of historic or current site activities.

I.6 Noise Impact.

As part of the existing Waste Permit, The Recycling Village Ltd carries out annual noise monitoring at 4 site boundary locations as shown on the Site Emissions Monitoring Plan Ref: 12039-LA-05.

The results of the last previous noise survey are presented in Attachment E and conclude that the noise environment that surrounds the facility is a complex one with several different businesses operating simultaneously which all have an effect on the noise in the immediate area in and around the facility.

Although the day time noise levels recorded at the front site boundary were above the day time Waste Permit limit of LAeq 55 dB (A), the facility is located within a purpose built industrial estate, away from sensitive locations. Consequently, noise emissions from the facility are unlikely to have a negative impact on sensitive locations beyond the site boundary.

I.7 Assessment of Ecological Impacts & Mitigation Measures.

The Recycling Village Ltd is located in a purpose built industrial estate. There is no significant ecology on the site. Consequently, this section is not applicable.