ENVIROCO MANAGEMENT

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ENVIRONMENTAL IMPACT STATEMENT

NON TECHNICAL SUMMARY

FOR

A PLANNING APPLICATION FOR KMK METALS RECYCLING LTD

KMK METALS·RECYCLING

ACCUMULATOR™ BATTERY RECYCLING RECHARGE YOUR ENVIRONMENT

AT

CAPPINCUR IND. ESTATE, TULLAMORE, CO. OFFALY

SEPTEMBER 2012

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EXCELLENCE THROUGH PEOPLE STANDARD

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1.0 INTRODUCTION

The Environmental Impact Assessment (EIA) Regulations require that a non-technical summary is prepared as part of an Environmental Impact Statement (EIS). The non-technical summary process is to ensure that the public are aware of both negative and positive impacts of a project on the natural environment.

This EIS has been prepared on behalf of KMK Metals Recycling Ltd (to be referred to as KMK hereafter), Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly by ENVIROCO Management Ltd. Bow House, O'Moore Street, Tullamore, Co Offaly to accompany a Planning Application to Offaly County Council in accordance with Schedule 5 of the Planning and Development Regulations 2001

The KMK facility operates as a Hazardous and Non-Hazardous metals waste transfer station specialising in metallic and Waste Electronic and Electrical Equipment (WEEE), subject to regulation from the EPA (existing Waste Licence W0113-03) and Offaly County Council as the planning authority (through existing planning permissions).

KMK is a registered company (reference number: 67176) and has been involved in the metals recycling business at its facility in Tullamore since 1985. With the introduction of the Waste Management Act 1996, KMK Metals applied to the EPA for a waste licence and this was granted in December 2001 for a hazardous and non hazardous metallic wastes transfer facility.

With the onset of the Waste Electrical & Electronic Equipment (WEEE) Regulations providing for a national legal framework to manage WEEE waste, KMK established two distinct trade names i.e. WEEE Recycle ® registered on the 27th November 2002 and Accumulator registered on 16th April 2007 both ahead of their respective Irish regulations.

From 13 August 2005, all retailers of Electrical & Electronic Equipment (EEE) must comply with the WEEE Regulations 2005. Producers of EEE must register with the WEEE Register Society and where they are producing household consumer EEE, they can join a compliance scheme such as WEEE Ireland or the European Recycling Platform (ERP) to help meet their collection, recycling and reporting requirements as specified in the Regulations. An examination of Ireland's progress on WEEE recycling, has been carried out by the EPA and reported in their yearly National Waste Reports publications. The most recent EPA publication 'National Waste Report 2010', reports that 45,012 tonnes of total Waste Electrical and Electronic Equipment (WEEE) was collected in 2010, which is very similar to the 2009 figures. Slightly less than 50% of WEEE collected in Ireland in 2010 was exported abroad for treatment.

KMK is the principal contractor of the WEEE Ireland compliance scheme and also provides service to the ERP compliance scheme. KMK is responsible for managing over 45% of Ireland's total WEEE. Therefore KMK has an overall national positive impact by the implementation of the WEEE Directive and a provision of recovery of WEEE within Ireland, thereby reducing the need to export WEEE for treatment overseas.

Future developments of the WEEE Directive will involve new collection rate targets (currently set at 4kg/person in EU) but exceeded to an average of 9kg /person is achieved in Ireland at present (reported in EPA National Waste Report 2009).

As a result of future demands in WEEE management, KMK has found it necessary to; 1) expand their existing site which is subject to a waste license review with the EPA at present, 2) propose to increase their permitted annual tonnage of waste acceptance from 20,000 tonnes to a maximum of 35,000 tonnes and 3) install various WEEE recycling plant and equipment using Best Available Technologies (BAT) into the facility. The proposed expansion in activity does not include any alteration of waste types accepted at the site. However, in order to achieve a more sustainable waste management strategy, the installation of new WEEE recycling plant will greatly increase recovery fractions of wastes accepted on-site and allow KMK to compete with similar European waste processors in the market place.

The proposed KMK expansion is in the interests of proper and sustainable development as described in the Offaly County Development Plan 2009-2015. The KMK facility is classed as existing industrial land within Cappincur Industrial Estate. The proposed increase in waste acceptance capacity will help meet local and national targets with regard to waste management and recycling, in line with the WEEE Directive and Waste Management Regulations.

The local planning authority (Offaly County Council) was notified of the waste licence review application in 2009 and subsequent communication letters from the EPA. As a result of which, confirmation of the requirement for a planning application and this EIS was hence obtained by KMK in a letter dated 17th February 2012 (see page 11 of the Main EIS).

Potential alternatives to the proposed development at the existing facility were considered with regard to location, site design and processes and thus investigated such items as; project economies, land availability, engineering feasibility and planning considerations. Cognisance of the Environmental Protection Agency document 'Advice notes on current practice (in the preparation of Environmental Impact Statements) 2003' was observed in this process.

KMK has an established history of planned and sustainable development at

Cappincur Industrial Estate. Therefore, the option of relocation to an alternative site within Tullamore or its Environs was determined not viable both environmentally and economically as this would require KMK to close its facility for its relocation and to develop a possible Greenfield site which would result in an environmental burden of resource usage, site clearance, ecological depletion and site appraisal. With regard to appropriate planning, land at and surrounding the site is zoned for industrial development, as is illustrated in the Environs Development Plan 2010-2015 Land Zoning Map (main EIS Figure 2.1.2). Therefore it is considered that the most environmentally responsible option is for development of the existing KMK Metals facility site.

On conclusion and taking into consideration the three critical alternatives (location, design and process) and assessment of these by virtue of a matrix table (main section of EIS), it was fully reasoned that the existing waste management operation at the Cappincur site is the correct and justified option in terms of low impacts on the environment, suitable road network, industrial land zoning, comprehensive infrastructure already in place and design suitability for the proposed planning application to increase the annual waste acceptance to 35,000 tonnes.

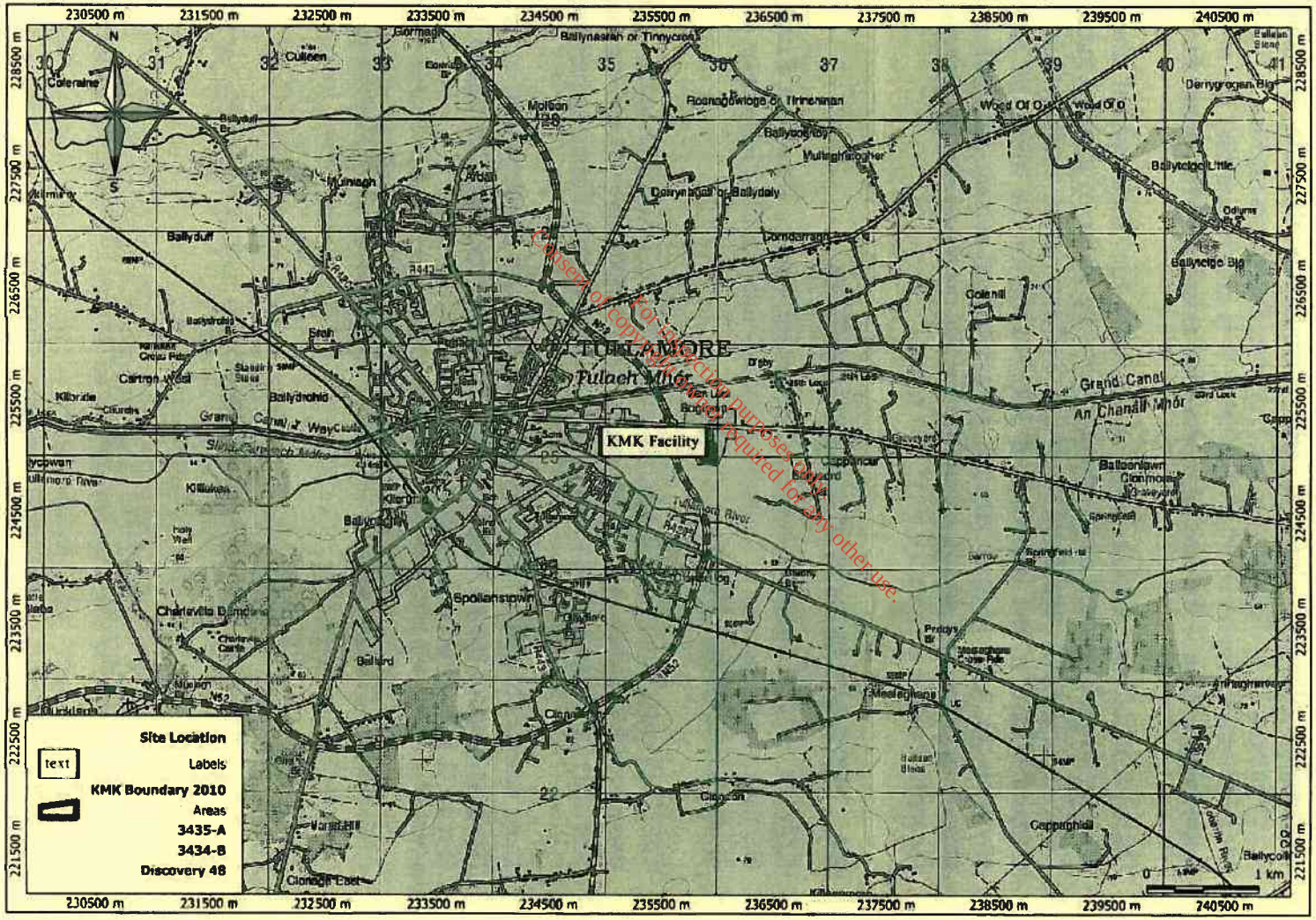
2.0 SITE LOCATION AND DESCRIPTION

KMK is located in the Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly towards the east of Tullamore town, (National Grid Reference E635890 N725043) as shown in Figure 1 below.

The Cappincur Industrial Estate is populated by industrial units, warehousing, retail, commercial couriers and waste management businesses. Land surrounding the site is primarily in use as agricultural grassland with a once off housing pattern.

Land surrounding the site is zoned for industrial development, as is illustrated in the Draft Tullamore Town and Environs Development Plan 2010-2015 Land Zoning Map (Figure 2.1.2 of the main EIS).

Figure 1 General Location Map of KMK Metals



3.0 PROPOSED DEVELOPMENT

KMK currently operates a hazardous and non hazardous metal waste and WEEE transfer facility and is EPA licensed ref W0113-03 to handle 20,000 tonnes of waste. A waste licence review application has been submitted to increase the annual intake to 35,000 tonnes.

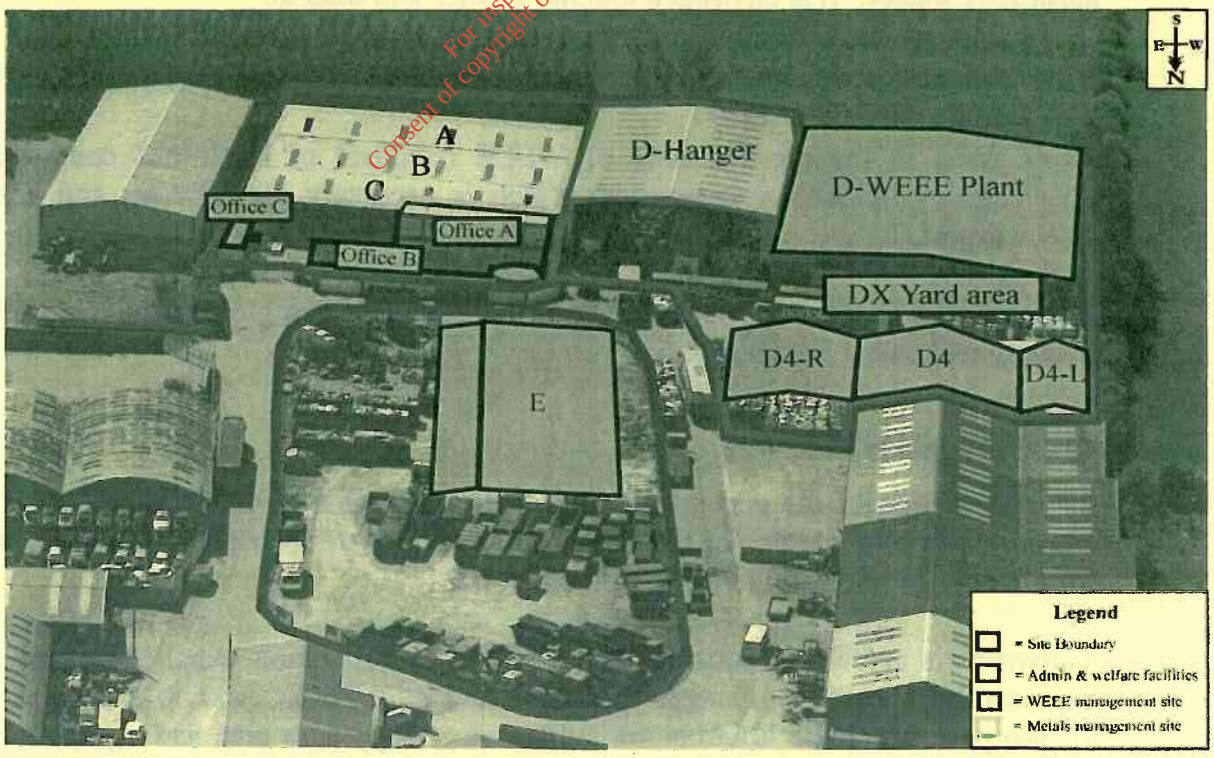
Operations at the KMK facility can be divided into two main areas 1) the WEEE materials recovery area and 2) the metals and specific metallic waste recovery area.

The WEEE recycling and recovery area covers the majority of the site and incorporates the D-Hanger (used for WEEE acceptance and pre-treatment), D-WEEE Plant (used for WEEE recovery dismantling operations), D4 (CRT television & monitor de-pollution), D4-R (steel baling and washing machines de-pollution), D4-L (used for portable batteries recycling) and E building (reserved for WEEE activities).

Metallic wastes separation and storage occurs at buildings A, B and C.

Figure 2 provides an overview of the existing site layout. Chapter 2 of the EIS describes in full each building located at the existing site, its use, and the processes which are involved in the recycling and recovery of metal wastes and WEEE.

Figure 2. Existing Site Layout



The planning permission proposal is to increase waste acceptance at the site from 20,000 tonnes to a maximum of 35,000 tonnes per year. It is expected that approximately 85% of the waste intake figure will account for WEEE and the remaining 15% of incoming waste will be metallic based materials. The only waste to be sent to landfill from the facility is canteen waste (wheelie bin provider) and similar general non recyclable wastes.

In a 2009 report submitted to the EPA (Duty and Stand-by Capacity Report') it was concluded that there is adequate storage facilities at the site for additional tonnages of WEEE in a safe and secure manner.

KMK has established an internal management system or IMS. This IMS incorporates the following; ISO 14001:2004 Environmental Management System, ISO 9001:2008 Quality Management System and OHSAS 18001:2007 Health and Safety Management Standard. All elements of the IMS are audited annually by the certification body National Standards Authority of Ireland (NSAI).

All environmental monitoring is conducted at the site in compliance with the Waste Licence W0113-03. To date there have been no significant adverse impacts to the environment associated with operations at the site.

The revised facility will promote the recovery and recycling of hazardous and non hazardous wastes. It is envisaged that the facility will help to:

- improve the nationwide recycling/recovery infrastructure
- reduce the reliance on direct export of WEEE from sources (civic amenity sites and commercial sites)
- assist in the pre-treatment of WEEE (removal of hazardous components and sorting WEEE by categories) which is necessary for efficient and appropriate export.

The proposed changes to the facility will thereby provide a more sustainable solution to waste management within Ireland.

4.0 HUMAN BEINGS

An examination of the general population of the local area was carried out in order to consider any implications of the proposed development upon people in the area, which are not considered elsewhere throughout the EIS.

Tullamore is a town of considerable size, with a population which increased by 6.1% between 2002 and 2006, and further increased by 4.1% in 2011 to a current figure of 11,346 persons. The Environs of Tullamore – Cappincur area had a population of 79

persons in 2006, which has increased by 153% to a population of 200 people recorded in the 2011 Census. The Offaly County Development Plan 2009-2015 states that growth in Tullamore is targeted to a population from 13,000 minimum in 2006 to approximately 30,000 by 2020.

There are 11 residential buildings within 500m of the centre of the existing KMK site. There are no designated areas or sensitive locations (schools, churches or public grounds) and no recorded sites or monuments within 500m of the site.

There will be no change in land use of this area as a result of the proposed increase in capacity at KMK. There will be no expansion of the activity into Greenfield areas. There will therefore be no impact upon agriculture or other land use in the area.

A positive impact from the proposal will be on-going and additional employment. In addition, the KMK facility has a key role in helping Ireland achieve national WEEE collection and recovery targets.

There will be no negative impact with regard to land use since the proposed development will occur within the boundary of an existing Industrial Estate and will improve environmental management at the site.

Potential impacts to residences from the site regarding air quality, water run-off, visual impact, traffic and noise are discussed further in this non technical summary document.

5.0 TRAFFIC

A traffic impact assessment was carried out on behalf of KMK by TrafficWise Ltd in 2009 as part of the waste licence review application to the EPA and associated EIS at that time. The resultant assessment report remains relevant for this application.

In general, KMK vehicular traffic uses the N52 Tullamore Bypass when travelling to the site from all directions (north, south, east and west). The traffic enters the Cappincur Industrial Estate via the Daingean Road. The vast majority of traffic associated with KMK Metals therefore does not travel through Tullamore town.

The Daingean Road is a local road with a 60kph posted speed limit in the vicinity of the Cappincur Industrial Estate. The speed limit reverts to the default national speed limit of 80kph for local roads, approximately 0.5km to the east of the Industrial Estate.

The Daingean Road runs from Tullamore to Ballinagar in an easterly direction for approximately 10kms; at Ballinagar the road joins with the R402 before following on to Daingean, approximately 5km northwards.

In terms of traffic, KMK site is split into three areas: the WEEE recovery area; the Metals recovery area; and the car park (refer to layout drawing 12-022-P02).

The WEEE recovery area is made up of existing areas D-Hanger, D-WEEE Plant building, DX yard, D4, D4-L and D4-R buildings and E area. There are two gated accesses into the WEEE recovery area: one gate provides access to buildings D-Hanger and D-WEEE Plant; and the other gate provides access to buildings D4, D4-L, D4-R and the DX yard area. The E area is served by its own gate access point for waste collection vehicles and also another gate access point for staff and visitor parking separately.

The Metals recovery area is made up of existing warehouse buildings A, B and C and served by its own gate access point. The site offices and canteen are located directly in front of the metals recovery area.

In terms of traffic management, all waste collection vehicles will enter the yard at E area and weigh in on the weighbridge before proceeding to the relevant areas on-site. The vehicle access and marshalling area size at E is sufficient to allow all necessary vehicles through and allow for potential queing if required, thereby not impacting on the public road circling E area (refer to layout drawing 12-022-P02). This traffic management one-way system will ensure efficient traffic movements to and from the site which minimal truck idling events and minimal interference with other users of the industrial estate.

To provide an up-date to the traffic report in 2009, the daily traffic volumes were noted at the KMK facility for a week during April 2012 during normal uninterrupted waste activities. The following was noted; including traffic generated by staff and visitors, the existing site generates in the region of 25No. car/van trips and 37No. HGV trips per day.

Existing waste acceptance and operation hours will be remain from 06:00hrs to 22:00hrs Monday to Friday; and 06:00hrs to 13:00hrs on Saturday. The existing facility currently employs some 40 people including drivers, yard workers, administration and management staff.

The Traffic Assessment concluded that;

- the inclusion of an onsite weighbridge will be positive in terms of traffic management and will provide a reduced traffic hazard on the Daingean Road
- the forecast traffic generation of the current application is likely to be either traffic neutral or indeed beneficial to the network; accordingly, no further mitigation measures were recommended.

6.0 CLIMATE AND AIR QUALITY

Ireland receives good quality air from the prevailing winds of the Atlantic Ocean and Tullamore is generally influenced by predominantly wind from a South-Westerly direction. The annual mean wind speed as measured from the Met-Eireann Mullingar weather station for 2011 is 9.5knots which equates to a gentle breeze. The annual rainfall for 2011 measured at Mullingar is 944mm typical of midlands areas.

A condition of the KMK Waste Licence W0113-03 requires annual ambient dust deposition monitoring to be carried out at specific locations. The most recent ambient dust monitoring during August 2011 was carried out at 6 locations. Results showed that two monitoring stations recorded levels of dust higher than the Licence limit of 350 mg/m2/day. Both of these locations were strongly influenced by construction activities during that time e.g. buildings and ground-works activities.

Dust generation at the site is constantly controlled during periods of dry weather by the site mechanical road sweeper. At present, all areas are concrete surfaced and therefore less conducive to dust generation. This proposal is therefore expected to have a positive environmental impact with regard to dust generation and control. Control measures include:

- processing of waste inside buildings and only temporary outside storage of waste prior to processing and/or export from the facility
- sweeping and/or dampening down of areas where dust entrainment or windblown dust is likely, particularly during periods of dry weather i.e. by using the road sweeper

Annual metal analysis of ambient dusts also shows that there is no significance of metals in the general dusts around the facility.

There is one emission stack from the facility and only extracted air from inside the D-WEEE Plant building is discharged through the stack. The stack emissions are treated first by a robust filter unit before the cleaned air is released to atmosphere. The stack emission point is now conditioned within the existing waste licence from the EPA and monitoring conducted to date over two events approximately 6 months apart shows that the emissions are minimal in terms of general dusts and metallic constituents. The design and construction of the stack and associated infrastructure is comparable to best practise within industrial standards. In summary, air emissions as a result of the facility are minimal and not significant.

7.0 NOISE

The acoustic environment around the KMK site is typical of an industrial estate and reflective of activities at both KMK and adjoining businesses within the estate. There are no high sensitivity receptors for noise such as schools, churches, parks, etc within the estate and the N52 Tullamore By-Pass road is less than 0.5km from the site. There are some dwellings located at approximately 150 meters from their closest boundary (garden) to the site closest boundary (being E area) at KMK.

A condition of the KMK Waste Licence W0113-03 requires annual environmental noise monitoring to be carried out at specific locations around site boundaries. The most recent noise monitoring during Wednesday 30th November 2011 between 6am and 1pm yielded typical industrial noise levels ranging from a LAeq of 60-70dB at the boundary stations of the KMK facility which is typical of the acoustic environment within Cappincur Industrial Estate. Sampling was carried out at 6 locations along the facilities boundaries where accessible and 2 locations along the boundaries of the recent new area i.e. E Area.

There are currently no statutory limits for the control of environmental noise in Ireland. However, the EPA has issued a guidance note on noise emissions that states, 'Ideally, if the total noise level from all sources is taken into account, the noise level at sensitive locations should be kept below an LAeq value of 55dB(A) by daytime. At night, to avoid disturbance, the noise level at noise sensitive locations should not exceed a LAeq T value of 45dB(A).'

Noise sources from site activities, audible at the site boundaries have been identified as:

- HGVs and general waste collection vehicles entering/leaving the site
- Personnel entering/leaving buildings
- Unloading and loading of trucks with waste materials
- The movement/reversing alarms of fork lift trucks in the process areas
- Operation of the baler unit for Large Household Appliances (LHA).
- Processing of WEEE inside the D-WEEE Plant building
- Air extraction unit on the south wall at D-WEEE Plant building

The closest noise sensitive receptors are located adjacent the Cappincur – Ballinagar local road to the north, these houses are approximately 220 to 240 meters distance from the closest noise source at KMK's site.

Early morning (classed night time) measurements were taken over 15 minute intervals at all 6 monitoring stations. The results for these stations show that noise levels after 7am and were highest on the northern boundaries. Levels (given as L_{Aeq} i.e. continuous noise over a recorded time period) are not of sufficient values to breach the EPA limits of 45dB(A) at sensitive receptors.

The majority of stations recorded show relatively similar results, with L_{Aeq} over 30mins levels ranging from 63-66 dB.

The distance to, the obstacles present (other buildings, walls, hedging) and the proximity to other noise sources (closer industrial units, road traffic) would indicate that the noise levels recorded at the KMK facility are not likely to cause annoyance at Sensitive Receptors.

Similarly, day and night measurements show no recurring tonal aspect of noise although tones were identified at 4 stations from both the day and night recordings. The variance in the tonal features, the relatively low sound pressure that the tones had, would indicate that these tonal features would not be evident at sensitive receptors.

In conclusion, the results of the noise survey show that noise emissions from the KMK facility are not significant and typical of noise within industrial estate environments. Furthermore, the noise impact from KMK will not have any negative effect of neighbouring businesses within the estate.

8.0 SOILS AND GEOLOGY

ENVIROCO Management Ltd. completed site visits throughout 2012 and a desk based research of geology at the site and of the surrounding area. Additional information sources included the Geological Survey of Ireland (GSI), Offaly County Council, Environmental Protection Agency (EPA), Office of Public Works (OPW), National Parks and Wildlife Service (NPWS), Teagasc and Met Éireann.

The site is located in an established industrial estate at Cappincur approximately two kilometres east of Tullamore town centre. The land immediately surrounding the site is zoned industrial. The Grand Canal is located approximately 900m south of the site, a landscape classified as a High Sensitivity and of great importance for tourism and recreation valued particularly outside of settlement areas.

The existing site is covered with an impermeable surface of concrete. All ground underneath is thus protected from any potential contamination. Thus a robust drainage system of concrete surfaces, silt traps, attenuation tanks and interceptor units effectively treats all yard water run-off prior to discharge to the land drain along the western boundary. No emissions to the soil and geological environment at the site occurs and is not proposed as part of this development.

The wastewater from domestic effluent treatment on-site will be discharged to surface water also i.e. western land drain. Therefore the existing on-site percolation area will be

removed and decommissioned appropriately as part of the proposed Waste Water Treatment System up-grade works in line with this planning application.

Clean runoff from roofed areas will be discharged through the existing drainage network to the adjacent land drain.

The proposed development will invoke no change to the soil and geological environment of the site and surrounding area, thus a neutral, permanent impact is forecast.

The geological impact assessment forecasts no significant impact to soils and underlying geology as a result of this development.

9.0 WATER

A combination of desk study and numerous site visits throughout 2012 were carried out in order to form this assessment. The site is routinely visited by ENVIROCO Management Ltd. staff for quarterly surface water and annual groundwater monitoring events at the site. Desk study was carried out using data sourced at the Geological Survey of Ireland (GSI), Environmental Protection Agency (EPA), Office of Public Works (OPW), National Parks and Wildlife Service (NPWS), Teagasc and Met Éireann.

The KMK facility is situated at in the Shannon (HA25) Water Region. The Shannon River Catchment Area covers a vast area of over 15,000km^2, representing just over one fifth of the area of the Republic of Ireland. The site is underlain by a locally important aquifer, which would be capable of yielding enough water to boreholes or springs to supply villages, small towns or industrial operations.

Approximately 900m north of the KMK facility is the Grand Canal, and at a similar distance to the south of the site is the Tullamore River (IE_54_549; Stream Order 3), with an assigned interim status of "moderate" and requiring restoration by 2015.

Emissions to surface water from the site occur as clean roof rainwater run-off and yard water run-off. All yard water is discharged to an adjacent land drain (which subsequently flows through a myriad of other drains before joining the Tullamore River) along the west boundary of the site, via three emission points CX, DX and E.

All yard water run-off is treated effectively by the following infrastructure;

- Class 2 interceptor for treatment of surface water run-off from the site area leading to CX discharge.

- Class 1 interceptor for treatment of surface water run-off from the site area leading to DX discharge.

- Silt trap, attenuation tank and Class 1 interceptor for proposed treatment of surface water run-off from E area leading to E discharge point.

All surface water treatment infrastructure is routinely maintained and monitored to ensure their effectiveness at removal of contaminants from yard water prior to discharge to the land drain.

It is a requirement of Waste Licence W0113-03 that water emissions (presently CX and DX) from the KMK facility are monitored on a quarterly basis, with daily visual inspection, and bi-annual analysis of metals. Water monitoring to date shows both periodic elevations in levels of ammonia and conductivity at CX discharge and periodic elevations in suspended solids and COD levels at DX discharge. An investigation of the overall impact on the land drain as a result of discharges from CX and DX was undertaken in August 2011. This study assessed the ability of the land drain to absorb the discharge loadings from KMK and concluded that there is little to no reduction in the water quality of the land drain downstream of the discharge points CX and DX.

Annual analysis of groundwater is carried out at two locations at the KMK facility annually, in compliance with EPA Waste Licence W0113-03. The results to date shows that the groundwater quality is acceptable with no evidence of contamination from on-site activities. There is a notable elevated background level of nickel within one of the groundwater sampling boreholes.

There will be no discharges to sewer from the site in the absence of foul sewer facilities at Cappincur Industrial estate. All domestic effluent is presently treated on-site by the waste water treatment plant (WWTP) and percolation area. A significant up-grade works to the WWTS on-site is proposed to effectively treat effluent to a standard acceptable for discharge to land drain. This treatment is a 3 stage process; primary – existing tank to be modified for use as a primary holding and settlement tank, secondary treatment using a new sequence batch reactor tank with added dosing for nitrates and phosphates removal and finally biological treatment using a purpose designed sand filter system for final effluent polishing and loading reduction prior to discharge to land drain. The WWTS proposal will ensure the KMK facility is adequately serviced for all future operations.

10.0 LANDSCAPE AND VISUAL IMPACT

The potential impact of the development upon occupants of residential accommodation, users of public recreational open space, road users, and workers in their place of work was assessed. Site visits in April, May and July 2012 obtained views of the site from the surrounding locality (Tullamore area) and from within the Cappincur Industrial Estate (local and other businesses views). As these views both have different impacts, they will be discussed separately.

A total of 9 photographic viewpoints were taken of the KMK facility from various road locations approaching the site and 11 viewpoints were taken at the KMK site from within the industrial estate to assess the overall localised visual impact of the site on other estate occupiers and visitors. These are included in the EIS each with a brief discussion of the potential visual impact from the associated viewpoint.

In terms of visual impact, it was shown that from the local and regional roads in the area, only limited visibility of the KMK site, and the Cappincur Industrial Estate in general, are achievable. The N52 from the R420 junction to the Ballinagar Road junction, gives the greatest visible line of sight towards KMK. User of the Grand Canal approximately 900m from KMK will not have their views impacted upon by the KMK facility. In terms of other users of Cappincur Industrial Estate, KMK is readily visible. The building roofs of KMK are of similar height and wall cladding construction is one of industrial with all buildings appearing as of modern design and construction befitting an industrial estate. It was concluded that there will be no significant negative visual impacts upon local receptors as a result of the proposed development. No mitigation measures were proposed.

11.0 CULTURAL HERITAGE

An impact assessment was carried out in order to assess the potential impact of the proposed development upon features of archaeological and cultural importance at the site and in the surrounding area.

There are no schools, churches or public grounds (sensitive locations) within close proximity to the site.

There was found to be one Sites and Monuments Record (SMR) in the surrounding area, approximately 1380m south east of the site, beyond the Tullamore River, as indicated in Figure 11.3.1 of the EIS. This SMR is a possible medieval habitation site.

The identified SMR is sufficient distance from KMK not to be affected by site activities and the proposed development. There are therefore no anticipated impacts upon the cultural heritage of the area.

The KMK facility is located within an existing industrial estate, and the proposed development of the site will not result in further development of greenfield space, hence there will be no impact upon features in the area.

Furthermore, it is now widely accepted that the development of brownfield or existing industrial spaces is encouraged by Local Authorities and the EPA as it makes use of existing developed land and does consume new green-field spaces.

12.0 FLORA AND FAUNA

A desk review was carried out of the Offaly County Development Plan 2009-2015 and the Department of Environment, Heritage and Local Government (DoEHLG) National Parks and Wildlife Service (NPWS).

Flora, fauna and habitats of ecological importance at and within close proximity to the site are limited, by the nature of land use in the area, which includes the developed grounds of the industrial estate and the surrounding agriculture. Sensitive ecological habitats in the wider area include the Grand Canal pNHA and the Tullamore River, into which flows the land drain adjacent to the west boundary of the site.

The only designated area within relative proximity to the site is the Grand Canal proposed Natural Heritage Area (pNHA) - Site Code 002104 (approximately 900m from the site). The Grand Canal is listed in the Offaly County Development Plan 2009-2015 as a waterway of high sensitivity and high amenity. There are no impacts to the Grand Canal from the KMK site.

The KMK facility is located within the catchment area of the Tullamore River (IE_54_549), which has been assigned an interim water quality status of 'moderate' (Q-Rating 3-4), due for restoration by 2015. The Tullamore River flows south of the site in a North West direction toward and through Tullamore Town, where it then falls under protection by the Water Framework Directive as an RPA Nutrient Sensitive River.

As mentioned previously in the water section, the present and proposed future treated discharges from KMK to the receiving land drain and indirectly the Tullamore River is not expected to impact negatively on the status of the river.

13.0 INTERACTION OF THE FOREGOING

Chapter 13 of the EIS considers the interactions of likely significant effects of the proposed development on specific aspects of the environment, through the use of a Table 13.1.1 in the EIS, which indicates the likely interaction between transmitters and receptors of change.

Interactions can be positive, negative or neutral. In most cases, the interactions identified were neutral because of existing and proposed mitigation measures, and because the site is already operational as a developed industrial site, within an area zoned for industrial development.

In conjunction with Table 12.8.1 of the main EIS, examples of positive interactions are as follows:

- Human Beings, through implementation of the proposed development, will have an impact upon traffic and transportation. The Traffic Impact Assessment of the EIS shows that the proposed development includes installation of a weighbridge, which will significantly reduce the number of trips made by lorries into and out of the Industrial Estate, thereby reducing the total number of traffic movements at the site.
- A reduction in the number of traffic movements at the site, coupled with surfacing of the proposed E Area, is expected to greatly reduce the amount of dust created at the site and carried around the site on vehicle wheels, thereby improving air quality.

14.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Chapter 14 of the EIS summarises in Table 14.2.1 each identified potential impact of proposed development of the existing KMK facility on the environment. Each potential impact is ranked and the proposed mitigation measures to reduce any impacts are summarised alongside each impact.

The only potential for a significant negative impact upon the environment as a result of the proposed development, after assessment of the various parameters investigated by the EIS, is potential contamination of the land drain (and potentially indirectly the Tullamore River) through surface water and treated domestic effluent emissions from the site. However, the robust and effective measures (existing and proposed) as detailed in Section 9.5.2 of the EIS e.g. interceptors, silt traps, attenuation tank, fully upgraded WWTS, best practice in waste management on-site, ongoing environmental emissions monitoring / control and good housekeeping measures appropriate mitigation against this potential impact.

On consideration of the proposed development, continual improvements to site environmental management and infrastructural developments, it is forecast that the site will be greatly improved and there will be no significant impact on the environment as a result of this planning application.