

Main Office & Recycling Depot:-Luddenmore, Grange, Kilmallock, Co. Limerick. Tel. 061-351127 Fax. 061-351918 E-mail: info@mrbinman.com Web: www.mrbinman.com

Administration, Environmental Licensing Programme, Office of Climate, Licensing & Resource Use, EPA Headquarters, PO Box 3000. Johnstown Castle Estate, Co. Wexford.

9<sup>th</sup> September

Reg. No. W0061-03 Dear Sir/Madam In reply to correspondence received from the EPA dated the 10<sup>th</sup> of August regarding the application for a waste licence relating to the facility at Luddenmore, Grange, Killmallock, County Limerick Mr. Brighan now wishes to submit the following Pyright, information:

- 1. Having regard to the recently updated legislation, and in order to incorporate the requirements of the amended Waste Management Acts 1996 to 2011 and the European Communities (Waste directive) Regulations 2011, please find attached a revised Table B.7.1 (appendix 1), which revises the principal activity and the other activities on site and a revised Table H.1 (A) (appendix 2) with a revised estimation of the quantity of waste likely to be handled in relation to each class of activity applied for, based on the revised descriptions in the Third and Fourth Schedules.
- 2. With regard to the requirements of article 12(1)(V) of the Waste Management (Licensing) Regulations, 2004, as amended in relation to a description of how the waste hierarchy in section 21A of the amended Waste Management Acts 1996 to 2011 is applied, Mr. Binman operates the largest waste mechanical treatment facility in the Limerick/Clare /Kerry Waste Region which ensures all waste is undergoes recovery/recycling operations at a minimum with some waste types prepared for reuse in line with the hierarchy in Section 21A of the amended Waste Management Acts 1996 to 2011. The facility infrastructure includes a large mechanical treatment facility for residual waste to recover RDF, ferrous metals, non-ferrous metals and organic waste all of which are diverted from landfill and are currently sent for further recovery/recycling offsite. It is also proposed to send the remaining residual waste form this process for energy recovery at a thermal treatment facility off-site.





3. Colour separated glass is processed in the dedicated glass plant to produce colour separated glass cullet which is recycled and used as a raw material at the only glass bottle manufacturing facility in the island of Ireland. Mr Binman's glass plant is only one of two such facilities in the country.

Bulky waste is subjected to mechanical/manual recovery operations to recover materials including metals, plastics, timber and other components which are prepared for reuse. Construction and demolition waste is subjected to mechanical/manual recovery operations to generate aggregate suitable for reuse, timber for shredding metal for recycling and residual materials which are further processed in the residual waste treatment plant.

Dry recyclable waste is recovered at our dedicated dry recyclable waste recycling facility on-site or the material is transferred off-site to another MRF operated by Clearpoint. The facility also has the capability to process/recover source separated materials including cardboard and cans from can banks. All source separated organic waste is transferred off-site to a dedicated composting facility for further recycling.

The Luddenmore facility only accepts waste from authorised waste collectors who collect waste in compliance with Section 32(1). The majority of waste accepted at the facility is collected by Mr Binman who ensures the waste is collected in compliance with Section 32(1). In addition Mr Binman and its subsidiaries implement a collection regime to ensure waste is collected separately where technically, environmentally and economically practicable and waste is not mixed with other waste or other material with different properties. For example all customers are offered a dry recyclable collection and the majority of the household customer base is now provided with a source separated organic waste collection. Mr Binman has also implemented extensive roll-out of a source separated organic waste collection to commercial customers who are likely to generate significant quantities of food waste.
4. To reflect the changes in information supplied find attached a revised Non

technical summery (Appendix 3)

If you require any further information please do not hesitate to contact me.

Yours sincerely

Peter

Seamus Leahy Environmental Manager



## TABLE B.7.1 THIRD AND FOURTH SCHEDULES OF THE WASTE MANAGEMENT ACTS1996 to 2010

|     | Waste Management Acts 1996 to 2010  |     |     |   |     |  |
|-----|---|-----|-----|---|-----|--|
|     | Third Schedule  | Y/N |     | Fourth Schedule<br>Waste Recovery Operations  | Y/N |  |
| D 1 | United Schedule         Waste Disposal Operations         Deposit into or on to land (e.g. including landfill, etc.).         Image: second secon | Y/N | R 1 | <ul> <li>Yearth Schedule<br/>Waste Recovery Operations</li> <li>Use principally as a fuel or other means to generate energy: This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:         <ul> <li>0.60 for installations in operation and permitted in accordance with applicable Community acts before 1 January 2009,</li> <li>0.65 for installations permitted after 31 December 2008,</li> <li>using the following formula, applied in accordance with the reference document on Best Available Techniques for Waste Incineration:</li> <li>Energy efficiency = (Ep - (Ef + Ei)/ (0.97x(Ew+Ef) where—</li></ul></li></ul> | Y/N |  |
|     |   |     |     | '0.97' is a factor accounting for energy losses due to bottom ash and radiation.  |     |  |
| D 2 | Land treatment (e.g. biodegradation of liquid<br>or sludgy discards in soils, etc.).  |     | R 2 | Solvent reclamation/regeneration.   |     |  |
| D 3 | Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).  |     | R 3 | Recycling /reclamation of organic substances<br>which are not used as solvents (including<br>composting and other biological transformation<br>processes), which includes gasification and<br>pyrolisis using the components as chemicals.  |     |  |
| D 4 | Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).  |     | R 4 | Recycling/reclamation of metals and metal compounds.  |     |  |
| D 5 | Specially engineered landfill (e.g. placement<br>into lined discrete cells which are capped and<br>isolated from one another and the<br>environment, etc.).   |     | R 5 | Recycling/reclamation of other inorganic materials,<br>which includes soil cleaning resulting in recovery<br>of the soil and recycling of inorganic construction<br>materials.  |     |  |
| D 6 | Release into a water body except seas/oceans.   |     | R 6 | Regeneration of acids or bases.   |     |  |
| D 7 | Release to seas/oceans including sea-bed insertion.   |     | R 7 | Recovery of components used for pollution abatement.  |     |  |

| D 8  | Biological treatment not specified elsewhere<br>in this Schedule which results in final<br>compounds or mixtures which are discarded<br>by means of any of the operations numbered<br>D 1 to D 12.  |                 | R 8  | Recovery of components from catalysts.  |   |
|------|---|-----------------|------|---|---|
| D 9  | Physico-chemical treatment not specified<br>elsewhere in this Schedule which results in<br>final compounds or mixtures which are<br>discarded by means of any of the operations<br>numbered D 1 to D 12 (e.g. evaporation,<br>drying, calcinations, etc.).  |                 | R 9  | Oil re-refining or other reuses of oil.   |   |
| D 10 | Incineration on land.   |                 | R 10 | Land treatment resulting in benefit to agriculture or ecological improvement.   |   |
| D 11 | Incineration at sea (this operation is prohibited by EU legislation and international conventions).   |                 | R 11 | Use of waste obtained from any of the operations numbered R 1 to R 10.  |   |
| D 12 | Permanent storage (e.g. emplacement of containers in a mine, etc).  |                 | R 12 | Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R 1. | Р |
| D 13 | Blending or mixing prior to submission to<br>any of the operations numbered D 1 to D 12<br>(if there is no other D code appropriate, this<br>can include preliminary operations prior to<br>disposal including pre-processing such as,<br>amongst others, sorting, crushing,<br>compacting, pelletising, drying, shredding,<br>conditioning or separating prior to submission<br>to any of the operations numbered D1 to<br>D12). | Y<br>The sector | R 13 | Storage of waste pending any of the operations<br>onumbered R 1 to R 12 (excluding temporary<br>storage (being preliminary storage according to the<br>definition of 'collection' in section 5(1)), pending<br>collection, on the site where the waste is produced).  | Y |
| D 14 | Repackaging prior to submission to any of the operations numbered D 1 to D 13.  | Y               |      |   |   |
| D 15 | Storage pending any of the operations<br>numbered D 1 to D 14 (excluding temporary<br>storage (being preliminary storage according<br>to the definition of 'collection' in section<br>5(1)), pending collection, on the site where<br>the waste is produced).   | Y               |      |   |   |

### **Principal Activity**

In accordance with the Fourth Schedule of the Waste Management Acts 1996-2003, the Principal Activity will be:

**R12.** Exchange of waste for submission to any of the operations numbered  $R \ 1$  to  $R \ 11$  (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)

The mixed municipal waste entering the facility is processed through the dedicated mechanical treatment facility which mechanically separates materials which can be sent for further recycling/recovery such as organic fines, refuse derived fuel, ferrous metals, non-ferrous metals from residual waste. It is proposed to send the residual material from this recovery operation off-site for further recovery(energy recovery).

A picking station is available at the facility to segregate the recyclable materials into specific fractions including glass, plastic, cardboard, newspaper, ferrous metal and aluminium cans. The recyclables are baled separately and sent off-site for further recycling. Source separated recyclable waste (eg cardboard, plastic, metals) can also be subjected to further recovery operations on-site.

The glass recycling plant is designed to crush the glass into a cullet and remove contamination such as ceramics, corks, rings, papers, plastics, etc. The screened and crushed glass is removed to storage bunkers. When a sufficient quantity of glass has been collected it is transported to a bottle recycling facility for further recycling.

C&D rubble is screened, timber, plastic and metal and other materials removed before being crushed into uniform material suitable for reuse as aggregate. Timber is shredded and metals removed using dedicated shredders/magnets. Bulky waste is manually or mechanically treated to optimise separation of waste fractions for recovery including metals, timber, plastics.

 
 Other Activities
 prostation

 FOURTH SCHEDULE
 respective prostation

 R13. Storage of waste intendet
 submission to any activity referred to in a
 preceding paragraph of this Schedule, other than the temporary storage, pending collection, on the premises where such waste is produced.

This includes the storage dry recyclable waste prior to transport off-site for recovery/recycling at another facility.

#### THIRD SCHEDULE

**D13** Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12).

**D14** Repackaging prior to submission to any of the operations numbered D 1 to D 13.

**D15**. Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is *produced*)

Historically, the majority of residual waste received on-site was not subjected to a recovery activity and was sent direct to landfill for disposal. Due to significant development of recovery infrastructure on-site in the last number of years, the waste is now subjected to a recovery activity on site or sent off-site for recovery(hence the principal activity now being R12). However, the Licence review needs to take account of the possibility of transferring some waste (e.g residual waste from source separated collections) off-site for disposal in certain circumstances. As a result, disposal activities D13, D14 and D15 are included which takes account of waste that may be subjected to disposal activities D13/D14.

Consent of conviction purposes only any other use.



| Waste Manage    | mei  | nt Acts 1996 to  | Waste Manager    | me  | nt Acts 1996 to  |
|-----------------|------|------------------|------------------|-----|------------------|
|                 | 2010 | )                | 2                | 201 | 0                |
| 3rd Schedule (E | Disp | osal) Operations | 4th Schedule (Re | eco | very) Operations |
| Class of        |      | Quantity (tpa)   | Class of         |     | Quantity (tpa)   |
| Activity        |      |                  | Activity         |     |                  |
| Applied For     |      |                  | Applied For      |     |                  |
| Class D 1       |      |                  | Class R 1        |     |                  |
| Class D 2       |      |                  | Class R 2        |     |                  |
| Class D 3       |      |                  | Class R 3        |     |                  |
| Class D 4       |      |                  | Class R 4        |     |                  |
| Class D 5       |      |                  | Class R 5        |     |                  |
| Class D 6       |      |                  | Class R 6        |     |                  |
| Class D 7       |      |                  | Class R 7        |     | Q.*              |
| Class D 8       |      |                  | Class R 8        |     | or US            |
| Class D 9       |      |                  | Class R 9        | 50  |                  |
| Class D 10      |      |                  | Class R 🕼 🔗      | \$  |                  |
| Class D 11      |      |                  | Class & 10       |     |                  |
| Class D 12      |      |                  | Class R 12       | х   | 200,000          |
| Class D 13      | х    | 0-100,000        | Class R 13       | Х   | 0-200,000        |
| Class D 14      | х    | 0-100,000        | action net       |     |                  |
| Class D 15      | х    | 0-100,000        |                  |     |                  |
|                 |      | FOLSI            | 16               |     |                  |
|                 |      | 50P3             |                  |     |                  |
|                 |      | NO               |                  |     |                  |
|                 |      | melt             |                  |     |                  |
|                 |      | Ċ                |                  |     |                  |

Table H.1(a). Quantities of Waste in Relation to Each Class of Activity Applied for



#### NON-TECHNICAL SUMMARY

#### (a) - (d) Contact Details

Applicant for Licence Review:

Mr. Binman., Luddenmore, Grange, Kilmallock, Co. Limerick. Telephone: 061351127 Fax: 061351918.

Planning Authority: Limerick County Council

#### (e) Nature of the Premises and Facility

The premises is located in the townland of Luddenmore near the village of Ballyneety in Co.Limerick, adjacent to the city of Limerick.

The facility consists of a transfer station and a recycling centre. The infrastructure onsite is all directly or indirectly related to these activities and includes the following main components: a materials recovery facility, mechanical separation plant, a glass processing facility, transfer station, compactors, balers, timber shredding area, c&d waste processing plant, two garages, storage areas, wwtp, bunded fuel storage, truck wash station, offices and a canteen.

Waste materials recycled or recovered at the facility include residual waste, recyclable waste, bulky waste, glass, timber, rubble, aluminium, ferrous metals, cardboard, paper, plastic, organic waste and refuse derived fuel.

The current waste acceptance tonnage limit at the facility is up to 105,000 tonnes and it is proposed to increase this to 200,000 tonnes, subject to approval from the Agency.

#### (f) Classes of Activity

#### FOURTH SCHEDULE

**R12.** Exchange of waste for submission to any of the operations numbered  $R \ 1$  to  $R \ 11$  (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered  $R \ 1$  to  $R \ 11$ )

**R13.** Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than the temporary storage, pending collection, on the premises where such waste is produced.

### THIRD SCHEDULE

D13 Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12).

D14 Repackaging prior to submission to any of the operations numbered D 1 to D 13.

**D15**. Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)

(g) Quantity and Nature of Wastes Recovered and Disposed

| Year | Non-hazardous waste<br>(tonnes per annum)* | etonet waste<br>nov(tonnes per annum) | Total annual quantity<br>of<br>waste<br>(tonnes per annum)* |
|------|--|---------------------------------------|---|
| 2012 | 130000 Acop                                | 0                                     | 130000  |
| 2013 | 140000 cont                                | 0                                     | 140000  |
| 2014 | 160000 Cott                                | 0                                     | 160000  |
| 2015 | 180000                                     | 0                                     | 180000  |
| 2016 | 200000                                     | 0                                     | 200000  |

# PROPOSED ANNUAL QUANTITIES AND NATURE OF WASTE

\*Indicative values

#### WASTE TYPES AND QUANTITIES

| WASTE TYPE              | TONNES PER       | TONNES PER        | TOTAL (over life of |
|-------------------------|------------------|-------------------|---------------------|
|                         | ANNUM (existing) | ANNUM (proposed)* | site) tonnes*       |
| Household               | 66997            | 112600            | 112600              |
| Commercial              | 48433            | 81400             | 81400               |
| Sewage Sludge           | Not applicable   |                   |                     |
| Construction and        | 3570             | 6000              | 6000                |
| Demolition              |                  |                   |                     |
| Industrial Non-         | Not applicable   |                   |                     |
| Hazardous Sludges       |                  |                   |                     |
| Industrial Non-         | Not applicable   |                   |                     |
| <b>Hazardous Solids</b> |                  |                   |                     |
| Hazardous               | Not applicable   |                   |                     |
| *(Specify detail in     |                  |                   |                     |

| Table H 1.2)            |  |  |
|-------------------------|--|--|
| *In dianting and the se |  |  |

\*Indicative values

- (h) Raw Materials
- 6.3.1 Water Consumption

#### Water Consumption January– December 2007

| Source             | Total m <sup>3</sup> |
|--------------------|----------------------|
| Truck Wash         | 1078                 |
| Onsite water usage | 605                  |

### **Electricity Consumption January– December 2007**

| Electricity Consumed( KWH )                         |            | other 1,339,619  |  |  |  |  |
|---|------------|------------------|--|--|--|--|
| Fuel Consumption January– December 2005 red for any |            |                  |  |  |  |  |
| Diesel (off-site)                                   | inspection | 1,900,000 litres |  |  |  |  |
| Marked diesel (on-site)                             | FORDER     | 150,000 litres   |  |  |  |  |

## (i) Plant, methods, processes and operating procedures

#### Waste Acceptance

All the waste collected by Mr.Binman in the Limerick area is brought back to the transfer station. On arrival at his facility all waste is assessed, weighed, details of load recorded and then transferred to the relevant waste recycling area. The waste is then examined to ensure that it does not contain any hazardous material or other unacceptable waste types. If an unacceptable waste type is found it is removed to a waste quarantine area.

### Weigh Bridge

The weighbridge operates by means of an over-ground Avery scale. All vehicles carrying refuse in to the site are weighed before and after tipping The weighbridge can weigh vehicles up to 60 tonnes. The Legal Metrology Service checks the weighbridge for accuracy once a year. Details of every load of waste entering the facility are recorded at the weighbridge

### MBT/Transfer Station Facility for Residual Municipal Waste

The mixed municipal waste entering the facility is subjected to a recovery operation through the mechanical treatmentfacility which uses a combination of mechanical and manual processing to recover organic fines, refuse derived fuel, ferrous metals, nonferrous metals.. The facility is designed to operate with the transfer station area which utilises compaction systems to optimise waste transfer to other outlets for further treatment. It is proposed to send the residual material remaining after this recovery process for further recovery(energy recovery) off-site.

#### **Picking Station**

Dry recyclables can be transferred to a dedicated picking station which is used to segregate the recyclable materials into specific fractions including glass, plastic, cardboard, newspaper, ferrous metal and aluminium cans. The recyclables are baled separately and sent off-site for further recycling. The dry recyclable waste can also be transferred off-site to a dedicated MRF for recovery off-site. This facility can also be utilised for secondary processing of residual waste to optimise recovery of waste.

#### **Automated Glass Crushing Plant**

The glass recycling plant is designed to crush the colour separated glass into a cullet and remove contamination such as ceramics, corks, rings, etc. The glass crusher breaks the glass into small pieces, which allows for the removal of contaminants such as ceramics, corks, rings and labels. These contaminants are removed by a combination of a magnet, an eddy current separator, ceramic separators and a cyclone. The screened and crushed glass is removed to cover separated storage bunkers. When a sufficient quantity of glass has been collected it is transported to a bottle manufacturing facility for further recycling back into glass bottles. A OWNET rior

#### **C&D** Processing Area

Timber is shredded and metals reproved using dedicated shredders/magnets. C&D rubble is screened, timber, plastic and metal contamination removed before being crushed into uniform material suitable for reuse as aggregate. con

#### **Bulky Waste**

Bulky waste is subjected to mechanical/manual recovery operations to recover materials including metals, plastics, timber and other components which are prepared for reuse. Construction and demolition waste is subjected to mechanical/manual recovery operations to generate aggregate suitable for reuse, timber for shredding metal for recycling and residual materials which are further processed in the residual waste treatment plant.

#### **Source Separated Organic Waste Storage Area**

In order to optimise diversion of organic waste from landfill Mr. Binman started collecting source separated brown bin material in February of 2009 and have constantly been increasing both the number of commercial and domestic customers using the service since. In order to manage the large volume of brown bin material accepted at the facility a separate fully enclosed area has been designated to store the waste prior to being transferred off site to an approved composting facility.

#### WaterTreatment Plant

Foul water collected from the yard is drained to the water treatment plant. Wastewater is screened to remove papers, plastics and any other gross solids before it enters the wastewater treatment plant. The foul water will be treated in the wastewater treatment plant to a standard of 20mg/l BOD and 30mg/l Suspended solids. The treatment processes include a grease trap, aerated influent storage, level control pumping chamber, primary settlement(2), two aerated MBBR reactors, clarifier, pumping chamber trial polishing filter and an effluent storage tank. No wastewater will be discharged via the emission point unless it is compliant with the Waste Licence emission limit values.

(j) Information for the purpose of enabling the Agency to make a determination in relation to the matters specified in paragraphs (a) to (d) of section 40(4) of the Act.

#### Compliance with Section 40(4) of the Waste management Act 1996-2003

(a) As well as the existing controls in place, the changes proposed as part of this Licence Review will ensure compliance with the Licence emission limit values and any relevant standards and will ensure the activity does not cause environmental pollution. Namely:

- There are no discharges from the wwtp emission point until such time as it can be demonstrated that the wwtp is operating in compliance with the emission limit values.
- A laboratory was set up on site and an environmental analyst will ensure all compliance parameters are actively monitored to ensure compliance with emission limit values. This will allow sufficient data to be compiled to allow for optimization of the wwtp and to determine what additional measures will be implemented to ensure compliance.
- Separation of the drainage for the different yard areas and installation of the BAT oil interceptor will ensure discharges of environmental significance from FE2 do not occur.
- Diversion of uncontaminated rainwater from roofed surfaces has minimized the hydraulic loading to the wwtp ensuring the wwtp is not overloaded hydraulically.
- Dust emissions will continue to be reduced by covering the timber storage area, dry recyclables area, other storage areas, installation of a paved carpark and road way and relocation of a dust emission monitoring station to an appropriate location at the site boundary to ensure there is no impact offsite. These changes will ensure there will be no impact offsite.
- Joints on paved surfaces where waste is handled will be sealed to ensure groundwater protection.

(b) The Licence Review is part of a programme of improvements and along with the existing controls in place the changes highlighted above will ensure the activity does not cause environmental pollution.

In addition, increasing the waste tonnage acceptance limit will ensure more waste generated in the Region is recycled at this facility or transferred to our MRF in Clearpoint for optimum recycling, thereby preventing further pollution caused by waste in landfills. This will minimize the quantity of waste sent direct to landfill and it will contribute significantly to meeting Ireland's targets for diversion of waste from landfill.

(c) Mr Binman has always been at the forefront of the recycling industry in Ireland investing in the best available technologies to optimise waste recycling. Mr Binman has installed the best available oil interceptor on the market to ensure the discharges from the facility do not impact groundwater quality. Please refer to Section D.1 for further details.

Mr Binman will install the best available shredder to optimise diversion of waste from landfill and to optimise the efficiency of the MBT facility. Trials are ongoing to identify the most appropriate unit for our operations.

(d) Mr.Binman holds a current Environmental Protection Agency Licence and has been in the waste business for over fifteen years and Mr.Binman is committed to the diversion of waste from landfill through recovery and recycling and has continually expanded the recycling facilities on site with significant benefit to the environment.
 (e) Mr Binman has the necessary assessments made and financial supports in

(e) Mr Binman has the necessary assessments made and financial supports in place.

## (k) Source, Quantity, Location, Nature, Composition, Quantity, Level and Rate of Emissions

The changes proposed for this Licence review will reduce emissions to the environment:

- The new shredder will reduce disposal of residual waste to landfill by at least 11%.
- The new road way and carpark will reduce dust emissions created from the existing gravel carpark and will provide safer access and egress to and from the facility.
- The new laboratory will improve monitoring and control of emissions from the facility, in particular the wwtp discharges. No wastewater will be discharged from the wwtp emission point until the proposed control measures are implemented and it is demonstrated that the wwtp can operate consistently within the emission limit values.
- Installation of the new Class 1 full retention oil interceptor and improvements to the drainage system will eliminate emissions of environmental significance from the facility from this emission point associated with the oil interceptor.
- Provision of enclosed processing, storage and transfer areas will reduce noise, dust and potential litter emissions from the facility. These areas will also provide sufficient capacity to allow dry recyclables to be transferred to our

state-of-the-art MRF facility in Clearpoint, where the waste will be recycled to the highest standard.

The increased capacity will ensure a greater quantity of waste is recycled or • recovered thereby diverting more waste from landfill.

#### (1) Effects of Emissions on the Environment

As for Section k.

#### (m) Monitoring points

Due to the proposed projects and redefinition of the site boundary, it is proposed to relocate one dust emission point and one groundwater monitoring well. Location of these monitoring points were proposed in consultation with the consultants that conduct the compliance monitoring on our behalf. Relocation of these points will ensure the impact of the facility off-site is monitored accurately.

With the installation of the new oil interceptor the location of FE2 has changed slightly.

#### (n) Off-Site treatment/disposal of liquid/solid wastes

All wastewater generated on-site will be sent for further treatment off-site until the proposed changes in this Licence Review are completed and it can be demonstrated that the wastewater treatment plant discharges can be treated consistently within the (o) Measures to prevent/minimise impact of unexpected emissions

Additional measures proposed include the installation of the new oil interceptor which will contain any unexpected spillages of oil, diesel or other light fuel oils. All joints on the yard areas where waste may be handled will be sealed which will further protect groundwater.

#### (p) Closure, Restoration and Remediation

In the event of closure:

- All waste will be removed from the facility and disposed of to a licensed landfill facility
- All recyclable material will be removed to a licensed contractor -
- All plant and machinery will be sold and removed off site
- All buildings will be washed and sterilised, the foul water arising from this will be treated in the water treatment plant.
- Any wastewater remaining in the water treatment plant will be removed off site for further treatment.
- It is envisaged that all remaining buildings will be utilised for agricultural purposes.

Note: All attachments referred to in the above text can be found in the original application.