Attachment L.1: Compliance with the Waste Management Act 1996 to 2003

L.1.1: Section 40(4) of the WMA 1996 to 2003

Under the Waste Management Act 1996 to 2003, the Agency cannot grant a waste licence unless it is satisfied that:

(a) any emissions from the recovery or disposal activity in question (''the activity concerned'') will not result in the contravention of any relevant standard, including any standard for an environmental medium, or any relevant emission limit value, prescribed under any other enactment,

(b) the activity concerned, carried on in accordance with such conditions as may be attached to the licence, will not cause environmental pollution,

(c) the best available technology will be used to prevent or eliminate or, where that is not practicable, to limit, abate or reduce an emission from the activity concerned,

''(cc) the activity concerned is consistent with the objectives of the relevant waste management plan or the hazardous waste management plan, as the case may be, and will not prejudice measures taken or to be taken by the relevant local authority or authorities for the purpose of the implementation of any such plan,''

(d) if the applicant is not a local authority, the corporation of a borough that is not a county borough, or the council of an urban district, subject to subsection (8), he or she is a fit and proper person to hold a waste licence,

(e) the applicant has complied with any requirements under section 53.

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

(g) any noise from the activity concerned will comply with, or will not result in the contravention of, any regulations under section 106 of the Act of 1992,

(h) necessary measures will be taken to prevent accidents in the carrying on of the activity concerned and, where an accident occurs, to limit its consequences for the environment,

(i) necessary measures will be taken upon the permanent cessation of the activity concerned (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.'

Specific measures taken to comply with these requirements are outlined in this Attachment.

L.1.2: Impact of facility on environment and health

Section 40(4) parts (a) and (b) of the Waste Management Act 1996 to 2003 require that emissions do not contravene any relevant standard, and that the activity does not cause any environmental pollution.

As outlined in Attachments E, F and I, emissions from the waste-to-energy facility will not cause environmental pollution and will comply with all of the relevant standards including:

L.1.2.a General Operations Standards

- Waste acceptance and handling procedures (Attachments H.2 and H.3) will minimise any negative impacts on the environment from waste deliveries, in line with Article 5(1) of the **Waste Incineration Directive 2000/76/EC**. This includes maintaining the waste bunker and reception hall under negative air pressure to avoid any odour and windblown litter problems.
- The facility will be designed to stringent performance and health and safety standards to avoid accidental emissions as outlined in Attachment J.1.
- Equipment and structures will be designed in line with relevant codes and standards and in accordance with current best practice. Bunding and bunker structures will be designed in accordance with the **BS8007 Standard for the Design of Aqueous Liquid Retaining Concrete Structures**.
- Monitoring equipment will meet **TüV standards** for equipment certification and **EN14181 standards**.
- As outlined in Attachment L.1.3, the plant will be designed according to the principles of **BAT**.
- In line with Article 6(1) of the **Waste Incineration Directive 2000/76/EC**, the plant will be designed, equipped, built and operated to ensure that a temperature of 850^{o}C will be maintained for at least 2 seconds after the last injection of combustion air at all times. The plant will be equipped with an auxiliary burner which will be used to maintain these conditions where necessary.

L.1.2.b Air emissions and ambient quality standards

- The combustion process and flue gas treatment system have been designed to ensure that any emissions leaving the stack are well below the limits set out in Annex V of the **Waste Incineration Directive 2000/76/EC**
- Air dispersion modelling (see Section 7 of the EIS) found that the cumulative impacts on air quality from the facility will be well within the Ambient Air Quality Standards set out in **EU Directive 1999/30/EC**, even where the plant is operating at maximum or abnormal operating conditions.
- Modelling has predicted that ground level concentrations of odour will be lower than the limits set out in the **EPA Guidelines on odour** from tanneries, mushroom composting facilities and intensive pig production enterprises even during a worst-case meteorological year (see Section 6.4 of the EIS). This confirms that there will be no odour impacts.

L.1.2.c Human health standards for dioxins

- The predicted impacts of any dioxin or furan emissions from the plant on a theoretical Maximum At Risk Individual (MARI)[1] (Section 6.3 of the EIS) are well below the values set in the **EU Tolerable Weekly Intake (TWI) standards** by the Scientific Committee on the Risk Assessment of Dioxins

[1] A MARI is a theoretical individual living at the predicted location of maximum deposition of dioxins and furans from the facility, when the facility is operating at maximum capacity. The individual is a subsistence farmer spending 5,600 hours per year out of doors in the field where the deposition occurs. They spend 6 years as a child and 60 years as an adult living on the site and only consume produce grown or raised in the field.

and Dioxin-like PCBs in Food 22/11/2000 to protect human health. This result was confirmed by modelling the emissions for both maximum[2] and abnormal operating conditions.

L.1.2.d Effluent emission standards

- The facility has been designed to prevent the unauthorised or accidental release of polluting substances to soil or groundwater in line with the **EU Groundwater Directive 80/68/EEC** and Article 8(7) of the **Waste Incineration Directive 2000/76/EC**.
- The process has been specifically designed to be free of process effluent. Hence there will be no discharge of process effluent from the facility, in line with Article 8(2) of the **Waste Incineration Directive 2000/76/EC**.
- The only emission from the facility to ground will be treated sanitary effluent from staff and visitor facilities. The treatment system will be designed in line with **EPA Guidelines on Wastewater Treatment Systems** for Small Communities, Businesses, Leisure Centres and Hotels.
- The only emission to surface water will be clean surface water runoff from roofs and hardstanding areas, which will be controlled in line with recommendations set out in the **Dublin City Council Storm Water Management Policy** and Article 8(7) of the **Waste Incineration Directive 2000/76/EC** (see Attachment D.1.k).

L.1.2.e Noise standards

- Noise emissions from the facility will not exceed the standards of 55 dB(A) Laeq, (daytime) and 45 dB(A) Laeq, (night time) at the nearest noise sensitive locations as recommended in the **EPA Guidelines on Noise**. There will be no tonal or impulsive noise emissions from the facility (see Section 8 of the EIS).

L.1.2.f Standards regarding the protection of habitats

- The facility will not have any adverse impact on sites protected under the **EU Habitats Directive 92/43/EEC** or other areas within or near the site covered by a scientific or conservation designation as recognised by the National Parks and Wildlife Service (see Attachment I.7 and Section 12 of the EIS).

L.1.2.g Residues standards

- In line with Article 9 of the **Waste Incineration Directive 2000/76/EC**, dry residues will be stored in enclosed containers, and bottom ash residues will be recovered insofar as practicable (see Attachment H.4).
- The combustion process has been designed to ensure that any bottom ash leaving the grate furnace complies with TOC limits set out in Article 6(1) of the **Waste Incineration Directive 2000/76/EC**.

L.1.3: Application of Best Available Techniques

Section 40(4) part (c) of the Waste Management Act 1996 to 2003 requires that the facility be designed and operated in accordance with Best Available Techniques

[2] in line with EU Directive 2000/76/EC

(BAT) to prevent and reduce emissions or other adverse environmental impacts as far as practicable.

Although the EPA has published a Draft BAT Guidance Note on Best Available Techniques for the Thermal Treatment of Solid and Liquid Wastes, a final Guidance Note was not available at the time of compiling this review application. In its absence, the European IPPC Bureau Reference (BREF) Document on BAT for Waste Incineration (July 2005) was used to determine BAT as recommended in the EPA Draft Guidance Note. Local factors have also been taken into account. A copy of Sections 5.1 and 5.2 is provided in Appendix 3.1 of the EIS.

Specific measures that will be taken in the design and operation of the facility to comply with BAT are outlined below, in the order presented in the BREF document.

L.1.3.a Generic BAT for all waste incineration[3]

- **1:** The installation design has been selected to suit the anticipated characteristics of residual Irish MSW and similar wastes. Some provisions (see BAT #60) have been made for treating high calorific value waste, such as residues from mechanical-biological pre-treatment (MBT) facilities, if required in the future. However, MBT is not currently part of the North East Regional Waste Management Plan as explained in Attachment H.1.
- **2:** The site will be maintained in a tidy and clean state and will be regularly patrolled for litter as outlined in Attachment E.6.
- **3:** Equipment will be maintained in good working order through regular inspections and preventative maintenance as outlined in Attachment D.2.9
- **4:** Quality controls will be established and maintained to regulate waste input, as described in Attachments D.2.2, H.2 and H.3. The limitations and risks associated with the plant will be identified during the design phase in the form of hazard and operability (HAZOP) studies as outlined in Attachment J.1.1. These will be used in formulating standard operating procedures to minimise the risk of accident or emergency situations arising.
- **5:** All waste will be stored in areas with sealed and resistant surfaces as outlined in Attachment F.1.2. There will be no drainage from the waste or ash bunkers, which will be constructed in accordance with British Standards BS8007 with double containment as described in Attachment F.1.2.
- **6:** Storage in the waste bunker will be limited on average to four days. Logistics and operation managers will use experience from operations in Belgium to ensure that the bunker inventory is well managed.
- **7:** Primary air for waste combustion will be drawn from the reception hall and waste bunker area, as outlined in Attachment D.2.3, to prevent fugitive emissions of odour. Provisions have been made for the control of odour when the incinerator is not available, as outlined in Attachment D.2.2.
- **8 & 9:** Sludges, solid wastes and any non-conforming wastes will be stored separately, with the latter being consigned to a quarantine area outside the reception hall. More information on this is provided in Attachment D.2.2.
- **10:** Initial HAZOP studies, and the ongoing activities of the QESH team, will provide for the prevention, detection and control of fire hazards as outlined in

[3] Section 5.1 of the BREF Note, starting page 435.

Attachment J.1.1. Potential fire hazards and fire intervention and control systems are outlined in Attachment D.1.o.

- **11:** Mixing and shredding of waste as outlined in Attachment D.2.2 has been incorporated in the design to ensure a homogeneous feedstock to the furnace for optimal combustion.
- **12:** Ferrous metals will be recovered from the bottom ash as outlined in Attachment D.2.7. It is not envisaged to recover non-ferrous metals in the short term for reasons outlined in Attachment H.4.
- **13:** Operators will visually monitor waste storage and loading areas from the control room as described in Attachment D.2.2
- **14:** The waste feed hopper and bottom ash quench will act as plugs to isolate the furnace room and prevent the uncontrolled ingress of air into the combustion chamber.
- **15:** The furnace and boiler design, combustion air injection and reagent injection systems have been based on extensive supplier experience and dynamic flow modelling to burn waste continuously at high combustion efficiency and to recover as much energy as possible.
- **16:** Preventative maintenance (Attachment D.2.9) and operational procedures (Attachment C.2) will be put in place to ensure that planned and unplanned shutdowns can be minimised.
- **17,18,19:** A computerised control system will monitor and maintain combustion conditions at optimal levels and within appropriate boundary conditions as outlined in Attachment D.2.3. Operating conditions specified in Article 6 of the Waste Incineration Directive 2000/76/EC will be observed.
- **20:** Primary air will be pre-heated to between 120 and 150^{o}C before injection into the furnace by steam from the turbine extraction as illustrated in Attachment G.2.1.
- **21:** Auxiliary burners will be used to ensure the combustion conditions required by Article 6 of the Waste Incineration Directive 2000/76/EC are maintained at all times, as outlined in Attachment D.2.4.
- **22:** Heat removal close to the furnace will be facilitated by water cooling in the ceilings and walls, the wear zone just above the grate and the mid-section of the grate (see Attachment D.2.3).
- **23:** The design of the furnace and combustion chamber will be optimised using dynamic flow modelling to ensure the best possible conditions for the burnout of flue gases. It will be configured as a centre flow boiler with enhanced secondary air mixing and an optimal geometric design for improved combustion performance.
- **25:** As outlined in Section 5.6.4 of the EIS, the boiler has been designed to avoid operational problems caused by high temperature sticky fly ash.
- **26:** Energy efficiency has been taken into account wherever possible in order to maximise electricity exports from the facility as outlined in Attachment G.2. The flue gas treatment system was deliberately configured with energy efficiency in mind. BAT techniques applied include ensuring that the temperature in flue gas treatment components decreases from the boiler to the stack, optimising flue gas flow and primary/secondary air distribution and minimising the flue gas temperature at the boiler exit. The thermal conversion

efficiency of the boiler in transferring flue gas energy to steam for the production of electricity will be approximately 88%.

- **27 & 28:** Heat in the form of hot water or steam will not be directly supplied to end users for reasons outlined in Attachment D.1.t.
- **29:** To limit the effects of corrosion in the furnace and boiler, steam temperatures and pressures will be maintained at 400^{o}C and 40 bar respectively. The furnace room and first boiler draught will be protected with refractory or inconel lining. In the area above this lining and at the top of the first boiler pass, the boiler walls will be lined with back-aired tiles and SiC refractory.
- **30 & 31:** To maximise energy extraction in the turbine, an air-cooled condenser will maintain a vacuum of 0.1 bar abs at the turbine exit (see Attachment D.2.5).
- **32:** Consideration has been given to techniques minimising the level of energy demand in the facility as outlined in Attachment G.2.1, including selecting equipment with low energy demand, avoiding the requirement to re-heat flue gas and avoiding the use of primary fuels by using electricity generated in-house.
- **33:** An air cooled condenser has been selected to minimise water demand and effluent generation in line with local requirements.
- **34:** On-line and off-line boiler cleaning techniques will be used as noted in Attachment D.2.4.
- **35:** The flue gas treatment system will ensure emissions are well within the limits outlined in Annex V of the Waste Incineration Directive 2000/76/EC and within the limits outlined in Table 5.2 of the BREF document. Actual emissions are expected to be lower than the guaranteed values given in Table E.1(iii)(a) of Appendix E2, from experience in operating waste-to-energy facilities in Belgium (see Appendix E3).
- **36:** The flue gas treatment system has been designed in line with operating experience in Belgium to suit the expected waste properties and minimise energy use. For example:
    - SNCR was selected over SCR treatment for NO_x abatement to reduce energy consumption
    - the flue gas treatment system will be arranged so that components requiring the highest operational temperatures precede those requiring lower temperatures
    - the baghouse filter will be situated downstream of reagent injection
    - expanded clay[4] and activated carbon[5] will be used for the adsorption of dioxins and heavy metals.

  The flue gas treatment system and its effectiveness are described in Attachments D.2.6 and F.1.1.
- **37:** A description of the flue gas treatment selection process is provided in Section 3.4 of the EIS. The reasons for selecting the combined semi-wet and

[4] Located upstream of the spray drier absorber in a higher temperature zone
[5] Located downstream of the spray drier absorber in a lower temperature zone

dry process with recirculation were to minimise water and energy consumption, reduce effluent production and minimise process complexity. The proposed system includes a two stage removal of dioxins/heavy metals and acid gases, to provide flexibility in controlling inlet variations in pollutants. As the gases will leave the stack at a temperature of 140^{o}C, there will be no requirement for plume suppression. Emissions from this system will be well below the EU Directive 2000/76/EC limits.

- **38:** To minimise energy consumption, a single baghouse filter will be installed in the flue gas treatment system, as described in Attachment D.2.6.
- **39:** To minimise reagent consumption, hydrated lime will be reactivated and recirculated as described in Attachment D.2.6. Furthermore, flue gas monitoring will be used to control the injection of lime to the reaction duct at the stack and possibly also at the boiler exit as explained in Attachment D.2.6.
- **40:** The main predicted source of NO_x is fuel NO_x. This can be prevented by ensuring a long retention time for nitrogenous pyrolysis products at a low oxygen content. Where arising, NO_X will be abated by the injection of a Selective Non-Catalytic Reduction (SNCR) reagent at different levels above the combustion zone for maximum effectiveness (as per Attachment D.2.3). To optimise the effectiveness of the SNCR reagent, combustion flow modelling will be used to determine the optimal location of the reagent injection points and a Volumix system will be used to ensure good mixing of flue gases and homogeneity of temperature.
- **41:** To limit dioxin and furan emissions, temperatures in the furnace will be maintained at a minimum of 850^{o}C for 2 seconds, rapid cooling will take place in the boiler at temperatures between 250 – 400^{o}C and a combination of activated carbon and expanded clay will be used in the flue gas treatment system. These measures are described in more detail in Attachments D.2.4 and D.2.6.
- **42, 43, 44:** Not Applicable
- **45:** The injection of adsorption reagents to prevent mercury and dioxin/furan emissions will be controlled by downstream and possibly also upstream monitoring as described in Attachment D.2.6.
- **46:** The waste-to-energy process has been designed to optimise the use of water and recirculation of wastewater to ensure that no effluent is produced. Please refer to Attachment D.1.l for more information on the water balance of the plant.
- **47:** Care has been taken to establish separate systems for the drainage and discharge of rainwater from different areas to ensure that it does not mix with potentially contaminated water as outlined in Attachment D.1.k.
- **48:** Not Applicable
- **49:** As noted in Attachment D.2.3, the grate furnace has been designed to facilitate maximum burnout and minimise TOC in ash residues by promoting the mechanical break-up of waste on the grate and optimising the distribution of air. Controlling the air supply and distribution and the waste residence time will also help to optimise combustion conditions. Waste will be pre-mixed in the bunker to provide for a more homogenous feed to the furnace as outlined in Attachment D.2.2.

- **50 & 52:** As outlined in Attachment D.2.7 and H.4, the bottom ash, recovered metals, boiler ash and flue gas treatment residues will all be handled and stored separately. The composition of each stream will be assessed regularly to determine how it should be managed, and particularly, whether boiler ash can be handled as a non-hazardous residue with bottom ash.
- **51:** Not Applicable
- **53**: It is not envisaged to subject bottom ash to ageing onsite unless the separation and reuse of bottom ash components is possible. Please refer to Attachment H.4 for more information.
- **54:** It is not envisaged to pre-treat flue gas treatment residues onsite prior to export, as explained in Attachment H.4.
- **55:** Noise reduction measures selected to ensure emissions meet local requirements are outlined in Section 8.6 of the EIS.
- **56:** Indaver Ireland conducts all of its activities in accordance with its quality, environmental and health & safety management system which is accredited to the quality standard ISO 9001, the environmental standard ISO 14001 and the safety standard OHSAS 18001. For more details please refer to Attachment C.2.

L.1.3.b Special BAT for municipal waste incineration[6]

- **57:** As per BAT (**5**) and Attachment F.1.2, all waste will be stored in areas with sealed and resistant surfaces, in enclosed areas.
- **58:** The only storage of residual waste for processing onsite will be in the waste bunker, which will be maintained under negative air pressure in an enclosed area such that nuisances are effectively controlled, as outlined in Attachments D.2.2 and E.6.
- **59:** As per BAT (**11**) and Attachment D.2.2, mixing and shredding of waste in the bunker has been incorporated in the design to ensure a homogeneous feed to the furnace for optimal combustion.
- **60:** As outlined in Attachment D.2.3, the grate will be mostly air cooled with some water-cooled sections, as it has been primarily designed for waste with an average calorific value of 8 – 14 MJ/kg. However, the grate has been designed to be easily converted to a fully water-cooled grate should this be required.
- **61:** As per BAT (**27 & 28**) and Attachment D.1.t, the facility will not include combined heat and power (CHP) plant and/or export heat and/or steam due to a lack of heat demand in the area.
- **62:** The facility will generate on average 0.65MWh electricity/tonne MSW, which is at the high end of the recommended range of 0.4 – 0.65MWh electricity/tonne. Of this, approximately 0.55MWh electricity/tonne MSW will be exported to the national grid.
- **63:** The average installed electrical demand will be approximately 0.1MWh/tonne.

[6] Section 5.2 of the BREF Note, starting on page 450

L.1.4: Compliance with Waste Management Plan

Section 40(4) part (cc) of the Waste Management Act 1996 to 2003 requires that the activity concerned is consistent with the objectives of the relevant waste management plan.

One of the reasons for re-applying for planning permission (issued in 2007 as PL 17.219721) and for a review of the waste licence was to extend the capacity of the facility in line with the 2005-2010 *North East Region Waste Management Plan*. This plan states that, to achieve its goal of thermally treating 39% municipal waste arising:

It is an objective of the Plan to develop a Thermal Treatment Plant with a capacity of 150,000 to 200,000 tonnes per annum by 2007. A licence has already been obtained for the development of a facility at Carranstown in County Meath.

The plan clearly identifies the Carranstown facility as part of the region's strategy. It is therefore submitted that the facility is consistent with the requirements of the North East Region Waste Management Plan.

Also in line with the plan, the facility is designed to treat only the residual waste remaining after source segregation and as described in Attachment H.1.

L.1.5: Fit and Proper Person

Section 40(4) part (d) of the Waste Management Act 1996 to 2003 requires that the applicant is a fit and proper person. Please see Attachment L.2 for more details.

L.1.6: Compliance with Section 53

Section 40(4) part (e) of the Waste Management Act 1996 to 2003 requires that the applicant comply with any requirements under section 53, which includes providing to the Agency information on the applicant's ability to meet financial commitments or liabilities. Please refer to Attachment L.2 for details.

L.1.7: Energy efficiency

Section 40(4) part (d) of the Waste Management Act 1996 to 2003 requires that the energy be used efficiently in the carrying on of the activity concerned. Please refer to Attachments G.2.1 and L.1.3 for details.

L.1.8: Noise Emissions

Section 40(4) part (d) of the Waste Management Act 1996 to 2003 requires that any noise from the activity concerned will comply with, or will not result in the contravention of, any regulations under section 106 of the Act of 1992.

As highlighted in Attachments L.1.2 and I.6.2, noise emissions from the facility will not exceed the limits given in the EPA Guidelines on Noise. The limits set out in these Guidelines reflect EPA policy, developments in legislation, licensing requirements and BAT.

L.1.9: Accident Prevention

Section 40(4) part (h) of the Waste Management Act 1996 to 2003 requires that necessary measures be taken to prevent accidents in the carrying on of the activity concerned and, where an accident occurs, to limit its consequences for the environment.

Please refer to Attachment J.1 for more information on measures taken to prevent accidents and respond to emergencies at the facility.

L.1.10: Cessation of Activity

Section 40(4) part (h) of the Waste Management Act 1996 to 2003 requires that necessary measures be taken upon the permanent cessation of the activity concerned to avoid any risk of environmental pollution and return the site of the activity to a satisfactory state.

Please refer to Attachment K.1 for more information on measures proposed to avoid pollution risk and return the site to a satisfactory state, should it become necessary to shut down the facility.

L.1.11: Modifications to WMA Compliance

The principle modifications to matters pertaining to compliance with the Waste Management Act 1996 to 2003 between this application and details provided for Waste Licence 167-1 are outlined in Table L.1.a below.

Table L.1.a: Modifications to WMA Compliance

Aspect	Difference
L.1.3.a (5)	The waste and ash bunker and spill tank double containment systems provide for more secure containment than the previous containment system design.
L.1.3.a (8 & 9)	The quarantine area for non-conforming wastes will now be located in the service yard.
L.1.3.a (26 , 32, 36 & 63)	The expected energy efficiency of the plant has increased from 23% to 25%[7] because of efficiency gains in the flue gas treatment system and other measures. The temperature at the boiler exit has decreased to 190^{o}C[8] from 230^{o}C.
L.1.3.a (30 & 31)	The pressure at the outlet of the turbine has decreased from 0.15 bar abs to 0.1 bar abs for a more efficient energy conversion.
L.1.3.a (37 & 41)	The flue gas treatment system has been redesigned to minimise water consumption and effluent generation and to reduce energy consumption. As for the previous design, two stages of acid gas and dioxin/furan removal will be included. However, the baghouse filter has been repositioned at the end of the flue gas treatment system and the wet treatment and polishing stages have been removed. A combination of activated carbon and expanded clay will be used to remove dioxins and furans rather than activated carbon and lignite coke. Both the activated carbon and expanded clay will be injected rather being used as a solid filter. Due to the absence of a wet flue gas treatment stage, there will be no requirement to reheat the plume prior to discharge.
L.1.3.a (39)	Due to the redesign of the flue gas treatment system, it will now be possible to recirculate the lime reagent, to minimise the amount of solid residue generated and the amount of lime used.
L.1.3.a (46)	Although the capacity of the plant has increased, the total amount of water required has decreased from 15 m^3/h to 7.4m^3. This requirement will now be almost entirely made up from groundwater abstraction.
L.1.3.a (54)	It is not envisaged that flue gas treatment residues will be solidified onsite unless suitable landfill capacity becomes available in Ireland, as outlined in Attachment H.4.
L.1.3.a (60)	The grate has been designed with more flexibility in terms of cooling systems in order to adapt to higher calorific value waste (e.g. residues from a mechanical-biological treatment plant) should this be required.

[7] Based on the ratio of electricity generated (MW electricity) to thermal capacity of the boiler (MW thermal)
[8] The temperature at the boiler exit will be 190^{o}C according to up to date supplier information, although in the EIS the boiler exit temperature is noted as 230^{o}C.

L.1.4	The North East Region Waste Management Plan has been changed since 2001 and now calls for a 150,000 to 200,000 tpa capacity thermal treatment facility. It specifically identifies the Carranstown facility as part of the region's strategy.

Attachment L.2: Fit and proper person

The Waste Management Act 1996 to 2003 in Section 40(4)(d) specifies that the Agency shall not grant a licence unless it is satisfied that the applicant (if the applicant is not a local authority) is a fit and proper person. Section 40(7) of the Act specifies the information required to enable a determination to be made by the Agency, which includes:

- an indication of whether the applicant or other relevant person has been convicted under the Waste Management Acts 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.
- details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees.
- information to show that the person is likely to be in a position to meet any financial commitments or liabilities that may have been or will be entered into or incurred in carrying on the activity to which the application relates or in consequence of ceasing to carry out that activity.

Specific measures taken to comply with these requirements are outlined below.

L.2.1 Convictions under the Waste Management Acts

Indaver Ireland has never been convicted of any offence under the Waste Management Act 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1997 and 1990 or the Air Pollution Act 1987 or any other environmental legislation in the 30 years it has operated in Ireland either as Indaver Ireland Limited or as MinChem Environmental Services Ltd.

L.2.2 Technical Knowledge and/or Qualifications

Please refer to Attachment C.1 for a comprehensive outline of existing and proposed staff for operating the facility.

In addition to this, specialist Indaver NV staff based in Belgium will provide support to management, operations and quality, environment, safety and health staff based in Ireland. Indaver Ireland already works closely with Indaver NV on its existing Irish operations.

Indaver NV has operated since 1987 and has extensive experience in waste management and waste-to-energy facility operations. In 2006, the company handled over 1.8 million tonnes of waste throughout Europe. Of this, approximately 38% was recycled and 40% was treated in waste-to-energy facilities. At its largest waste-to-energy facility in Flanders, Belgium, over 700,000 tonnes MSW, industrial wastes and sludges are treated annually. This facility has both grate and fluidised bed incineration lines to cater for different waste types. Indaver NV also operates a waste-to-energy facility for hazardous waste with both static and rotary kilns, giving the company a broad range of experience in materials management and waste-to-energy technologies. The company also works closely with Leuven University, Flanders, on research into different aspects of the waste-to-energy process.

Indaver NV has never been prosecuted by the authorities. All operations are closely monitored and studies on air and soil quality near Indaver NV's facilities demonstrate that the company's activities have not had any negative impact on the environment or public health.

For more information about Indaver NV please refer to Attachment A.1.1.

L.2.3 Financial provision

L.2.3.a Statement of Accounts

Indaver NV has been operating since 1985 and is in a strong financial position to invest in waste management infrastructure in Ireland. Due to the company's range of operations and continual expansion, it is also in a position to both understand and meet any financial commitments or liabilities incurred by the activity relating to this application.

This is evident from the Financial Results from 2007[9], which are given in Appendix L1. Included in this report is the most recent year's audited accounts including balance sheets.

L.2.3.b Environmental Liabilities Risk Assessment

It is proposed to carry out an environmental liabilities risk assessment prior to operation of the facility, in order to identify any possible need for further financial provision. This will be submitted to the EPA when available.

L.2.3.c Liability Insurance

Indaver NV has a global insurance policy, which includes:

- Public and product liability up to €25,000,000 (see Appendix L2)
- Pollution Legal Liability up to €12,500,000 (see Appendix L3)

The Meath waste-to-energy plant will be covered under this global scheme.

L.2.3.d Contingency

Should circumstances arise whereby it becomes necessary to shut down the facility, Indaver Ireland will carry out decommissioning and restoration works as outlined in Attachment K.1.

In line with planning condition 28 of PL 17.219721, Indaver Ireland make financial provision to secure final restoration measures if required (under the terms of condition 27) and will enter an agreement empowering the planning authority to apply this security or part of it to the satisfactory completion of any part of the restoration plan.

The form and amount of this security will be agreed between the planning authority and Indaver Ireland or will be referred to An Bord Pleanala in default of agreement. The fund will be indexed in accordance with the Wholesale Price Index – Building and Construction (Capital Goods) as published by the Central Statistics Office, or as required by the Meath County Council.

[9] Extract from the Indaver NV Sustainability Report 2007, available at http://www.indaver.com

L.2.4 Modifications to Fit and Proper Person

The principle modifications to matters relating to the applicant being a fit and proper person approved in Waste Licence 167-1 are outlined in Table L.2.a below.

Table L.2.a: Modifications to the Applicant being a Fit and Proper Person

Aspect	Difference
L.2.3.a	Up to date accounts have been provided for Indaver NV and Indaver Ireland.
L.2.3.b	The Indaver NV insurance policy has been updated since the previous application .