4 PLANNING AND POLICY CONTEXT

4.1 INTRODUCTION

This section intends to outline how the amendments proposed in this application do not impact on the planning and policy context of the waste-to-energy facility at Carranstown, Co. Meath.

4.2 ASSESSMENT OF PLANNING AND POLICY CONTEXT

This section reviews whether or how the proposed additional 20,000tpa capacity and the acceptance of hazardous waste impacts on the policy rationale used in the planning decisions of both Meath County Council and An Bord Pleanala (ABP) in 2007 and 2009 accepting the need for the scheme at 200,000tpa capacity.

Specifically, this relates to policy that affects:

- The role of waste-to-energy as a waste treatment option (e.g. does the additional capacity align with current policy)
- The scale of waste-to-energy facilities and their location in relation to waste arising
- The co-treatment of hazardous and non-hazardous waste
- Hazardous waste management

These points are addressed separately below.

4.2.1 The Role of Waste to Energy

Since the previous planning permission was granted in November 2009, there have been relatively few changes to the Irish waste and energy policy environment. Existing policy continues to favour landfill diversion, promote the waste hierarchy and support the development of waste-to-energy capacity.

The key European Strategies and Directives relating to municipal waste, the Waste Framework Directive (2008/98/EC) and the Landfill Directive (1999/31/EC), remain unchanged. However, on a domestic level, these Directives have more recently been implemented and have a number of practical implications for the waste sector as discussed below.

Waste Framework Directive

The Waste Framework Directive was transposed into Irish legislation in early 2011. This means that the Regional Waste Management Plans and the National Hazardous Waste Management Plan must be evaluated by 31 December 2012 and, if necessary, be revised to be brought into line with the requirements of the Waste Directive (as specified in the *European Communities (Waste Directive)*

Regulations 2011). In particular, this will involve the introduction of the waste hierarchy as a priority order in the waste management strategy that each plan adopts, which was not previously the case.

The regulations also specify that waste producers and holders must ensure that waste undergoes recovery operations in line with the waste hierarchy. This applies to both hazardous and non-hazardous waste and is to be enforced by the EPA and Local Authorities through licences and permits insofar as is possible. The current lack of infrastructure means that waste producers and holders cannot comply.

These changes will strengthen the role of the waste hierarchy and support driving waste away from landfill, towards recovery activities like waste-to-energy.

Landfill Directive

Since 2009, Ireland has also entered into its first compliance year for the diversion of biodegradable municipal waste (BMW) from landfill under the Landfill Directive (starting in July 2010). The EPA has effectively applied these diversion targets to individual landfill facilities rather than on a regional or national basis via conditions in the landfill waste licences. These conditions restrict the quantity of biodegradable waste acceptable at landfill to 47% by weight of MSW intake from the 1st July 2010, and to 30% of intake from 2013 onwards. From 2016, only 15% by weight will be allowed to landfill. To meet these restrictions, a significant amount of MSW pre-treatment capacity is required; based on 2010 EPA data[1], up to 430,000tpa MSW capacity to meet 2013 - 2016 targets and a further 317,000t capacity to meet 2013 – 2016 targets.

Figure 2.1 in Chapter 2 and Figure 4.1 below show that only two landfills have met or performed better than the restrictions on biodegradable waste in the last 12 months. All other landfills in the country breached their BMW licence conditions. The EPA has confirmed that enforcing these licence conditions is now a priority for 2012. This will drive a need for waste-to-energy and other pre-treatment options that divert BMW away from landfill. Therefore, the Landfill Directive continues to be an important driver for waste-to-energy capacity development.

[1] See EPA National Waste Report 2010, available at http://www.epa.ie

Figure 4.1

Figure 4.1: Residual Waste Disposal in Ireland 2010-11

Facility	Operator	BMW % 2010 Q3	BMW % 2010 Q4	BMW % 2011 Q1	BMW % 2011 Q2	BMW % 2011 Q3	BMW % 2011 Q4	BMW % - average
GDA								
Arthurstown (Kill) Landfill, Co. Kildare*	Dublin City Council	47.00%	47.00%					47.00%
KTK Landfill, Co. Kildare	Greenstar			62.70%	59.98%	63.40%	0.00%	
Balleally Landfill, Co. Fingal	Fingal Co. Co.	50.90%	48.79%	50.82%	50.00%	53.55%	55.71%	51.11%
Rampere Landfill, Co. Wicklow	Wicklow Co. Co.	62.82%	57.30%	58.65%	55.90%	54.04%	49.84%	57.76%
Ballynagran Landfill, Co. Wicklow	Greenstar	63.59%	64.06%	65.57%	65.88%	63.04%	68.20%	64.87%
Drehid, Landfill, Co. Kildare	Bord Na Mona	53.27%	57.25%	57.95%	54.05%	53.76%	52.14%	54.61%
South West/Mid West								
North Kerry	Kerry Co. Co.	61.49%	61.89%	62.51%	63.78%	63.07%	63.41%	62.61%
Gortadroma, Limerick	Limerick Co. Co.	63.78%	62.75%	61.39%	60.44%	60.96%	58.49%	61.19%
Inagh, Ennis	Clare Co. Co.	53.28%	48.32%	59.78%	58.68%	64.38%	61.61%	58.75%
Connaught								
Derrinumera, Castlebar	Mayo, Co. Co.	61.44%	61.30%	60.45%	59.79%			60.42%
East Galway	Greenstar	62.82%	59.39%	63.75%	60.11%	56.43%	52.63%	59.38%
Ballaghaderreen, North Roscommon	Roscommon Co. Co.	54.02%	closed					54.02%
Cork								
Youghal, Cork	Cork Co. Co.	60.97%	46.78%	51.76%	42.78%	35.18%	39.87%	47.39%
Derryconnell, Cork	Cork Co. Co.	63.81%	closed					63.81%
Midlands								
Kyletelesha, Portlaoise	Laois Co. Co.	50.36%	51.41%	49.93%	51.64%	45.56%	52.28%	50.17%
Ballydonagh, Athlone	Westmeath Co. Co.	72.03%	closed	closed	closed	closed	closed	72.03%
Ballaghaveny, Nenagh	North Tipp Co. Co.	61.42%	58.96%	56.81%	56.81%	56.81%		58.48%
Derryclure, Tullamore	Offaly Co. Co.	55.04%	58.05%	50.92%	60.08%	59.63%	58.93%	56.48%
North East								
Whiteriver, Ardee	Louth Co. Co.	45.90%	47.16%	60.71%	60.71%	60.71%	9.60%	53.87%
Scotch Corner, Monaghan Town	Monaghan Co. Co.	50.63%	52.45%	54.93%	53.37%	50.53%	46.40%	52.58%
Knockharley Landfill, Co. Meath	Greenstar	56.32%	57.23%	59.42%	53.41%	50.67%	57.05%	55.79%
South East								
Donohill, Tipperary Town	South Tipp Co. Co.	54.90%	59.79%	62.61%	58.62%	55.31%	61.81%	58.88%
Powerstown, Carlow	Carlow Co. Co.	55.52%	56.42%	57.27%	55.68%	56.86%	54.41%	56.10%
Holmestown, Wexford	Wexford Co. Co.	55.73%	55.36%	55.35%	57.03%	57.63%	57.87%	56.32%
Donegal								
Ballynacarrick, Donegal	Donegal Co. Co.	60.89%	60.26%	57.36%	53.21%	57.52%	58.64%	58.20%
Total Disposed		**55.75%**	**56.43%**	**58.48%**	**57.50%**	**57.41%**	**54.97%**	**56.79%**

SOURCE: Data from Landfill BMW returns, EPA (not validated)

Renewable Energy Directive

Since the previous planning application in 2009, Directive 2009/28/EC on the promotion of the use of energy from renewable sources was published. This sets mandatory renewable energy targets for Member States to achieve by 2020. The definition of biomass as a renewable energy resource includes "the biodegradable fraction of industrial and municipal waste", which means that waste-to-energy facilities treating this fraction (which is inseparable from municipal waste) generate renewable energy.

The Renewable Energy Directive was transposed into Irish legislation under the *European Communities (Renewable Energy) Regulations 2011* . Ireland's target under the Directive is 16% energy from renewable sources, which is to be achieved through 40% renewable electricity, 10% electric vehicles and 12% renewable heat by 2020.

These targets support the generation of electricity from waste through waste-to-energy technology.

National Waste and Energy Policy

There have been no new national waste or energy policy developments since 2009. Existing policy – including the *National Climate Change Strategy*, *Waste Management: Taking Stock and Moving Forward (2004)*, *National Strategy for Biodegradable Waste (2006)*, *Policy Guidance WIR 04/05, Bioenergy Action Plan for Ireland (2007)* and the *National Development Plan 2007 – 2013* all support the development of waste-to-energy capacity as a preferred treatment option for residual waste, that diverts waste from landfill and generates renewable energy. These were addressed in detail in the previous planning application.

There have been two recent pieces of legislation introduced that provide for increasing the landfill levy. The *Environment (Miscellaneous Provisions) Act 2011 (No. 20 of 2011)* introduced powers to the Minister to increase the landfill levy by up to €50/t per year to a maximum level of €120/t. S.I. No. 434 of 2011 (*Waste Management (Landfill Levy) Regulations 2011)* enabled the first increase under the new Act, which brought the landfill levy to €50/t from September 2011. The regulations also provided for an exemption from the levy for bottom ash from waste-to-energy plants. This ensures the overall effect of the levy is to dis-incentivise landfill and not its alternatives. The levy confirms the States support for the hierarchy, but recent market conditions would indicate that the first levy increase has not been enough and that more needs to be done. This can be achieved by further increases in the levy which have been proposed but have net been legislated for and/or by policy measures such as the direction of waste via the Waste Collection Permit system.

Regional Waste Policy

The Waste Management Plan for the North East Region, last updated in 2005, confirmed the need for a 150,000 – 200,000tpa capacity waste to energy facility. At 220,000tpa, the Meath facility would exceed this regionally required capacity if it were only to service the North East Region. However, it is submitted that the additional capacity available at the facility should be used to help meet national

targets and obligations such as the Landfill Directive (see above) through inter-regional cooperation. This is addressed in more detail below.

The County Meath Development Plan (2007-2013) supports this suggestion insofar as it includes the policy goals of implementing the hierarchy and the Regional Waste Management Plan, taking into account the proximity principle, the inter regional movement of waste and the need for quality, cost effective waste infrastructure and services that align with the polluter pays principle. As previously stated in Section 2.2.1, the Planning Authority may decide to limit the time-frame for such an extension of capacity until the required infrastructure in other waste management regions is developed in line with their respective waste management plans. It is estimated that more certainty in Waste Policy may incentivise development in this area.

Summary

Overall, any recent changes in waste policy or legislation have served to strengthen the position of waste-to-energy as an alternative to landfill for residual waste. Therefore, the proposed additional 20,000tpa capacity aligns with current policy in terms of being a suitable preferred treatment type for residual waste. The policies discussed above are summarised in the table below.

Policy / Legislation	Update?	Description	Impact on Facility
Waste Framework Directive	Transposed in early 2011	Requires review of regional waste plans, and the application of the waste hierarchy as a priority order. Requires waste producers / holders to ensure waste undergoes recovery.	The facility will provide a higher in hierarchy recovery outlet for both hazardous and non-hazardous waste.
Landfill Directive	Now in compliance year 2010 – 2011	The EPA applied limits on landfill licences on the acceptance of biodegradable waste. Landfills are not currently meeting these targets.	The facility will provide additional capacity to assist in diverting biodegradable waste from landfill.
Renewable Energy Directive	Updated & transposed	Sets mandatory renewable energy targets (16% for Ireland)	The facility will contribute to renewable electricity targets
Existing Irish Climate Change, Waste and Energy policy	No change	Existing policies support the development of waste-to-energy capacity as a preferred treatment option for residual waste.	The facility will provide additional waste-to-energy capacity to help meet landfill diversion and other targets
Environment (Miscellaneous Provisions) Act 2011 (No. 20 of 2011)	New	Introduces capacity for Minister to increase landfill levy by up to €50/t at a time to a maximum of €120/t.	The facility will provide an alternative to landfill that this levy is aimed at promoting.
(Waste Management (Landfill Levy) Regulations 2011)	New	First landfill levy increase under the above act – brings the levy up to €50/t as of the 01 September 2011.	
Waste Management Plan for the North East Region	No change	Seeks a 150,000 – 200,000 tpa capacity waste-to-energy facility	It is proposed that the facility provides this capacity as well as

County Meath Development Plan	No change	Supports inter regional cooperation	additional capacity to adjacent regions

4.2.2 Scale and Location of Waste to Energy

As noted above, the Waste Management Plan for the North East Region sets out a requirement for 150,000 – 200,000tpa thermal treatment capacity.

While this capacity has now been realised in the North East, it is apparent that other regions have not been successful in developing the capacity originally sought in their Waste Management Plans. For example, the Connaught, Limerick/Clare/Kerry and South East regions have thermal treatment in their waste management plans but have not yet developed any capacity. In the absence of such pre-treatment capacity, as highlighted above, landfills across the country are failing to meet their BMW diversion targets.

The *Meath County Development Plan 2007-2013* and *Policy Guidance WIR 04/05* both support inter-regional co-operation taking into account the proximity principle and the need for cost effective waste management infrastructure. Specifically, the WIR 04/05 states that in preparing waste management plans, the relevant authorities:

> *"should recognise that the application of the proximity principle does not entail interpreting administrative waste management planning boundaries in such a manner as to inhibit the development of waste management infrastructure which will support the attainment of national waste management policy objectives through the rational development and use of such infrastructure"*

Waste management plans are currently under review, as per the *European Communities (Waste Directive) Regulations 2011,* and a revised national waste policy is pending, following consultation which took place in late 2011 and is now complete. However, it is clear that in the current economic climate, this rational development and use of infrastructure is now more important than ever. In support of this, the recent policy consultation *Towards a new National Waste Policy* suggested that further consideration would be given to existing policy flexibilities in relation to inter-regional movements of waste, so that:

> *"regional boundaries do not operate in a rigid manner, preventing the most efficient use of infrastructure in pursuit of overall national targets/obligations"*.

It also refers to the improved co-ordination and potentially reviewing the structure of waste management regions, which would further support this rational use of waste management infrastructure with a view to meeting national targets and obligations.

Summary

It is submitted that the current climate and the direction of new policy is towards promoting more inter regional co-operation in attaining waste policy goals. The proposed 20,000 tpa additional capacity at

the Meath waste-to-energy facility would provide other regions with an opportunity to move towards Landfill Directive and Waste Framework Directive objectives.

Policy / Legislation	Update?	Description	Impact on Facility
Policy Guidance WIR 04/05	No	Supports inter regional cooperation	The proposed capacity increase would enable the facility to support other regions's pre-treatment needs and targets
Towards a New National Waste Policy	(Consultation)	Suggested greater flexibility in relation to inter-regional movement of waste	

4.2.3 Hazardous Waste Policy

National Hazardous Waste Policy

The Waste Framework Directive (2008/98/EC) provides the overarching framework on waste management requirements including both hazardous and non-hazardous waste and replaced the Hazardous Waste Directive (91/689/EEC). It requires that Member States draw up waste management plans, which was transposed into Irish legislation through Section 26 of the Waste Management Acts 1996 to 2011. It also requires that the waste hierarchy is followed as a priority order in both hazardous and non-hazardous waste management plans and policies.

The *National Hazardous Waste Management Plan 2008 – 2012* sets out a number of core objectives including a drive for increased self-sufficiency in the management of hazardous waste and an objective to reduce hazardous waste export. This would yield a number of benefits including:

- Meeting the proximity principle as set out in the Waste Framework Directive
- Reducing the potential for hazardous waste spillage in event of an accident during transport
- Reducing the greenhouse gas emissions associated with transport
- Achieving security of supply in outlets and reducing the risk associated with Member States imposing restrictions on imports of hazardous waste.

The Plan notes that:

> *"If Ireland were to become fully self-sufficient, hazardous waste landfill and incineration (or alternatives) would be required".*

It recognises that co-incineration in cement kilns can provide an important opportunity for treating blended solvents, chipped tyres, meat & bone meal and SRF. However, the plan also finds that material that does not have an optimal calorific value or that is unsuitable for blending and co-incineration requires an alternative solution such as incineration. It is recognised that waste-to-energy can provide the necessary flexibility in handling a wide range of hazardous waste streams including both liquid and solid materials. The plan leaves the development of such capacity to the private sector, which must *"judge whether investment in an Irish hazardous waste management incineration facility, or alternative*

treatment technologies, would make commercial sense in the context of the evolving European market".

The plan does not identify any location or region as being most suitable for hazardous waste treatment. As stated previously, Indaver is committed to the development of a Waste to Energy facility capable of treating hazardous waste in Ringaskiddy, Co Cork which is currently in the planning process.

Regional Hazardous Waste Policy

The EPA Hazardous Waste Management plan sets out the infrastructure required for hazardous waste treatment, but (as noted) does not specify the region or area in which it should be located.

The North East Waste Management Plan recognizes the role of the Private Sector in provision of waste services, and specifically that the Private Sector must play their part in the development of waste facilities for commercial and industrial waste such as WEEE, C & D and hazardous waste – the proposed amendments will go some way to delivering a facility to treat certain types of hazardous wastes. The North East Waste Management Plan also addresses hazardous waste management with a focus on the Local Authority responsibility to cater for small-scale producers. It refers to the (pre-2006) National Hazardous Waste Management plan which suggested 2 engineered landfill cells for hazardous waste were required nationally in the Dublin area and in the South East. It also states that consideration will be given to the provision of new facilities that cater for waste not provided for in the collection system, such as WEEE, C&D type waste and hazardous materials such as batteries. This supports the development of treatment capacity for certain hazardous waste streams as proposed here.

The North East Waste Management Plan states that the National Hazardous Waste Management Plan is under review, and the North East Regions will have regard to the recommendations. As outlined above, this Plan has subsequently been replaced but the North East Regional plan has not been updated to reflect any recommendations.

It is noted that the 2008-2012 National Hazardous Waste Management Plan also identifies a need for a hazardous waste landfill capacity, in order to achieve self-sufficiency in hazardous waste treatment in line with its key objectives. In June 2011 MEHL were granted planning permission for a hazardous and non-hazardous landfill facility in Hollywood, Co Dublin. The waste licence application has been submitted to the EPA. If granted, this facility will fulfill part of the need identified in the National Hazardous Waste Management Plan and, combined with Indaver's Meath facility, would provide the North-East with a unique set of infrastructure for the treatment of hazardous and non hazardous waste.

Summary

Policy / Legislation	Update?	Description	Impact on Facility
Waste Framework Directive (2008/98/EC)	Transposed in 2011	Specifies a waste hierarchy for both hazardous and non-hazardous waste,	Meath facility would facilitate the recovery of hazardous waste in Ireland
National Hazardous	Not relevant	Sets out core objectives including	Meath facilty would

Waste Management Plan 2008 – 2012	to previous application	increased self-sufficiency in hazardous waste management	improve self sufficiency by providing some hazardous waste treatment capacity in Ireland & reducing exports

Co-treatment of Hazardous and Non-Hazardous Waste

The Meath WTE is classified as a recovery facility (R1)meeting the minimum energy efficiency criteria of 0.65 according to the R1 formula, in Annex II of the Waste Framework Directive (2008/98/EC). This classification will not be affected by the treatment of hazardous waste as the plant will still be primarily dedicated to the treatment of MSW.

There is no specific guidance available in the Waste Framework Directive or other policy relating to the co-treatment of hazardous and non-hazardous waste in a waste to energy plant . The co-processing of hazardous and non-hazardous streams is widely practiced across Europe in municipal waste to energy facilities and cement kilns, and was also recently approved at a cement kiln in Ireland. [2]

The European Commissions' *Best Available Technique* guidance notes (BREF Notes) for Waste Incineration, based on Sections 5.1 and 5.2 of Annex 1 of the IPPC Directive, 96/61/EC, outline the technical considerations relating to waste incineration of hazardous and non-hazardous waste. This does not preclude the co-treatment of hazardous waste with non-hazardous waste, but does specify a number of handling techniques. Compliance with these technical requirements is addressed in more detail in Chapter 5.. It is noted that, as the guidance is specifically for dedicated hazardous waste treatment facilities, many of the conditions do not apply to the Meath waste-to-energy facility where the proportion of hazardous materials in the overall bulk of waste treated will be very limited (5% or less). It should be noted that the Industrial Emissions Directive 2010/75/EU will be applicable to the Meath WTE in January 2014. This directive has merged the IPPC Directive, the Waste Incineration Directive and other sectoral directives into a single directive and strengthens the application of BAT across the EU. The requirements of this directive are being taken into consideration where applicable but in the context of Meath WTE do not deviate substantively from the principles enshrined in the BAT Guidance Document, IPPC directive and WID. This is discussed further in Chapter 5

Summary

Policy / Legislation	Update?	Description	Impact on Facility
BREF Note on Incineration	Not relevant to previous application (in this context)	Sets out technical guidance for waste incineration of municipal and hazardous waste	Design of facility accommodates specifications in BREF

[2] Final Determination issued 12/03/12 P0487-06 (Lagan)