



Proposed Development at Knockharley Landfill (ABP Planning Ref. PL17.303211)

Response to Request for Further Information – Query No. 1

CREATED FOR:

Knockharley Landfill Ltd.



CREATED:

October 2019

1 INTRODUCTION

Knockharley Landfill Ltd. submitted an application for a proposed strategic infrastructure development at Knockharley Landfill in December 2018. This application for permission was accompanied by an EIAR, of which Chapter 4 identifies, describes and assesses in an appropriate manner, the Need for the Development. In a request for further information dated 16th May 2019, at paragraph 1, An Bord Pleanála requested *the applicant to comment on the made by the Eastern-Midlands, Southern and Connacht-Ulster Waste Management Planning Regions, in particular its recommendations regarding the following:*

- That a restriction be imposed on the quantity of residual MSW that can be accepted at the facility for disposal to 188,000 tonnes per annum,
- That contingency capacity of 44,000 tonnes per annum be maintained at the facility,
- That the acceptance of IBA for storage pending recovery be restricted to 5 years, with flexibility for extension, and
- A prohibition on the placement of baled recyclables in the landfill void and a restricted timeline be applied on the period of storage of baled recyclables.

The applicant is requested to clarify why there is no consideration in the EIAR of the proposed development at the Drehid landfill facility currently before the Bord for consideration (PL09.300506) and which, if permitted could have implications for the future waste management scenario.

COMMENTS ON WASTE MANAGEMENT PLANNING REGIONS JOINT SUBMISSION

The application for permission in respect of the proposed development at Knockharley Landfill was prepared following extensive consultation with the Eastern, Midlands, Southern and Connacht-Ulster Waste Management Planning Regions (“the Regions”). Subsequent to the application for permission being submitted to the Board, on 11 February 2019, the Regions made their Joint Submission on the application for permission to the Board. The Applicant and its consultants have carefully considered the issues raised in the Joint Submission made by the Regions.

In particular, the Applicant acknowledges two significant statements made by the Regions in the Joint Submission (both at page 1):

- *“...the proposed development is of national importance owing to limited capacity nationally for the management of residual waste.”*
- ***“The Regions recognise and support the need for continued, albeit limited, landfill capacity, for inert, non-hazardous, and hazardous waste. EU and national policy is underpinned by the waste hierarchy, which places landfill at the lowest tier, however for certain waste streams which are not suitable for recycling, recovery, or combustion, landfill remains a viable and necessary option. This is articulated in the Plans, which were published in 2015, and this continues to be the case in 2019.”*** [Emphasis added]

The Board, in its request for further information, has specifically sought the Applicant’s comments on four issues arising from the Regions’ Joint Submission, which responses as set out below (following the same order as set out in the Board’s letter dated 16 May 2019).

That a restriction be imposed on the quantity of residual MSW that can be accepted at the facility for disposal to 188,000 tonnes per annum(tpa)

Within the EIAR - Chapter 4, the Applicant established that there is a need currently and in the future for the proposed development. In the EIAR, the Applicant presented the need for the proposed development under a number of headings which included:

- Quantification of wastes requiring management
- Decreasing landfill capacity
- C&D waste arisings
- Incinerator bottom ash volumes
- Thermal treatment capacity
- Capacity provided by export.

Quantification of wastes requiring management

Using the most recent national data published by the EPA, the Applicant has shown that that, in 2012, a total of 2,478,337 tonnes required management and of this 1,027,577 tonnes was landfilled. In Table 4.3 of the EIAR, the Applicant presented data from the regional waste management plans, which project that, in 2020, a mid-point (average of a high and low predicted range) waste generation of 2,927,951 tonnes will be reached. Using projections from the regional plans it was shown that taking into account a recycling rate of 50% being achieved by 2020, 1,463,976 tonnes of residual MSW will require management.

Decreasing Landfill Capacity

As set out within Table 4-1 of the EIAR (reproduced below as Table 1.1), there were 33 operational landfills in 2008, with the closure of East Galway in 2019, the number of operating facilities currently stands at three.

Table 1-1: Operational MSW Landfills between 2008 and 2018

Facility	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ballynacarrick	0	0	0	0	0	-	-	-	-	-	
Derrinnumera	0	-	0	0	0	-	-	-	-	-	
Rathroeen	0	0	0	0	0	0	0	0			
Scotch Corner **	0	0	0	0	0	0	0	0	0	-	
Balleally	0	0	0	0	0	-	-	-	-	-	
Kyletalesha ***	0	0	0	0	0	-	-	-	-	-	
Whiteriver	0	0	0	0	0	0	-	-	-	-	
Arthurstown	0	0	0	-	-	-	-	-	-	-	
Rampere	0	0	0	0	0	-	-	-	-	-	
Powerstown	0	0	0	0	0	0	0	0	0	-	
Youghal	0	0	0	0	0	-	-	-	-	-	
North Kerry	0	0	0	0	0	0	0	-	-	-	
Gortadroma	0	0	0	0	0	0	0	-	-	-	
Donohill	0	0	0	-	0	0	0	-	-	-	

Facility	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Holmestown	0	0	0	0	0	-	-	-	-	-	
East Galway	0	0	0	0	0	0	0*	0*	0	0	0
Drehid	0	0	0	0	0	0	0	0	0	0	0
Knockharley	0	0	0	0	0	0	0*	0*	0	0	0
Ballynagran	0	0	0	0	0	0	0	0	0	0	0
Corranure	0	0	0	-	-	-	-	-	-	-	
Inagh	0	0	0	0	-	-	-	-	-	-	
Kinsale Road	0	0	-	-	-	-	-	-	-	-	
Derryconnell	0	0	0	-	-	-	-	-	-	-	
Ballynacarrick	0	0	0	0	-	-	-	-	-	-	
Balleally	0	0	0	0	-	-	-	-	-	-	
Dunmore	0	0	0	-	-	-	-	-	-	-	
Ballaghveny	0	0	0	0	-	-	-	-	-	-	
Derryclure	0	0	0	0	-	-	-	-	-	-	
Ballaghderreen	0	0	0	-	-	-	-	-	-	-	
Ballydonagh	0	0	0	-	-	-	-	-	-	-	
Killurin	0	-	-	-	-	-	-	-	-	-	
KTK	0	0	0	0	-	-	-	-	-	-	
Kerdiffstown	0	-	0	-	-	-	-	-	-	-	
No. of Operational facilities	33	30	31	23	18	11	10	7	6	4	4
<i>* East Galway Landfill and Knockharley Landfill did not accept significant quantities of waste in 2014 & 2015</i>											
<i>** Scotch Corner ceased waste acceptance in Q2 2017</i>											
<i>*** Kyletlaesha Landfill facility re-opened in Q3 2017 for the acceptance of C&D soil and stones</i>											

1.1.1 Construction and Demolition (C&D) Waste Arisings

As tabulated in in Table 4-7 Chapter 4 of the EIAR, the total C&D waste generated in 2015 was 5.1 million tonnes.

Table 4-8 of the EIAR - (reproduced below as Table 1.2) summarised data from the 'Construction & Demolition Waste – Soil and Stone Recovery/Disposal Capacity' report, produced by the three regional authorities. This report summarises the data, applies the identified forecast growth rates from 2016 onwards, and outlines the projected shortfall in capacity for the management of these materials in future years.

Table 1-2: Forecasted C&D Soil and stones quantities, with shortfall identified

Soil & Stones	2016	2017	2018	2019	2020	2021	2022	2023
Forecast Quantity, t	4,004,000	4,644,640	4,988,343	5,237,761	5,499,649	5,774,631	5,947,870	6,126,306
Identified Shortfall	1,279,600	1,200,000	1,533,000	2,621,000	2,958,000	3,283,000	3,456,000	3,979,000

Incinerator Bottom Ash Arisings

Table 4-6 of the EIAR (again, reproduced below, for ease of reference, as Table 1.3) shows that, in 2020, the total incinerator bottom ash requiring management is predicted to reach 157,300tpa.

Table 1-3: IBA quantities in future years (approximate)

Facility	2017	2018	2019	2020	2021	2022	2023 - 2030
Carranstown ¹	39,800	39,800	39,800	37,300	37,300	37,300	37,300
Dublin Waste to Energy ²	60,000	120,000	120,000	120,000	120,000	120,000	120,000
3rd EfW facility (Ringaskiddy) ³	-	-	-	-	-	52,600	52,600
Total, tonnes	99,800	159,800	159,800	157,300	157,300	209,900*	209,900*
*in event of a 3 rd dedicated waste to energy facility being developed							

Thermal Treatment Capacity

800,000 tonnes of indigenous thermal non-hazardous capacity is provided by the incinerators operating at Carranstown and Ringsend, a further 65,000 tonnes of thermal capacity is licensed by the EPA for Derryclure but it is uncertain when or if this plant will commence operations.

As the above synopsis shows, the EIAR clearly established the need for the proposed development at Knockharley landfill and the contribution this proposed development will make to providing an outlet for the management of residual MSW and other non-hazardous wastes. The continued need for residual MSW treatment capacity in Ireland is underscored in a letter dated 21st June 2019 issued by the Department of the Communication, Climate Action and Environment, see Appendix 1. Indeed the opening line from this letter states: - *The Irish waste sector continues to experience capacity issues on an ongoing basis, with residual MSW in particular requiring continued monitoring and careful management.*

In order to fully understand the context within which the Regions request that a limit is imposed on the quantity of residual MSW that can be accepted at the proposed development, it is important to reiterate that the Applicant is seeking permission for the acceptance of non-hazardous wastes (290,000 tonnes per annum) and incineration of bottom ash (150,000 tonnes per annum) and not solely the acceptance of residual MSW. In this context, it is significant that permission is sought for acceptance of the following waste types, in addition to MSW:

- Non-hazardous Soils and Stones and Other C&D wastes
- Non-municipal Bulky Waste
- Street Sweepings and Cleansing Wastes
- Non-hazardous Industrial Wastes

¹ Carranstown has permission to increase waste acceptance to 235,000 tonnes until end of 2019, reverting to 220,000 tonnes thereafter - figure calculated from pro-rata increase on 2015 IBA tonnage

² as per Section 1.11.3 of the 2006 Dublin Waste to Energy EIS (<http://www.epa.ie/terminalfour/ippc/ippc-view-filter.jsp?regno=W0232-01&filter=b&docfilter=qo>), assume commencement beginning Q1 2018 (in terms of IBA being managed nationally)

³ 6,583 kg/hr over 8,000 hrs, Planning Application, Section 4 of EIS; http://www.ringaskiddyrrc.ie/pdfs/Environmental_Impact_Statement/EIS_Vol_2_Main_Text/EIS_Ch_4_Project_Description_Issue_1.pdf

Table 2.5 of the EIAR- Chapter 2 outlines the waste types and quantities included in the Applicant's application for permission (reproduced, for ease of reference as Table 1.4).

Table 1-4: Waste Types, Quantities and Recovery and/or Disposal Activities

Waste Types	Total Quantities Envisaged	Recovery Activity	Disposal Activity
Incinerator Bottom Ash	Up to 150,000 tonnes per annum	In the event of the acceptance and placement of IBA in dedicated cells, prior to a subsequent offsite recovery application, being considered as an 'R13' storage activity ⁴	In the event of the acceptance and placement of IBA in dedicated cells with no subsequent recovery
Soils & Stones & Other C&D wastes	Up to 290,000 tonnes per annum	Where used as cover and/or construction materials during landfilling operations	When not used as cover and/or construction materials and deposited within the landfill void
Residual Municipal Solid Waste (including municipal bulky waste)		Where residual MSW fines are processed, either onsite in the proposed biological treatment plant or offsite, and utilised as cover material during landfilling operations	Where residual MSW is deposited directly within the landfill void
Non-municipal Bulky Waste		Unlikely to be utilised in a recovery application	Where non-municipal bulky waste is deposited directly within the landfill void
Street Sweepings & Cleansing Wastes		Unlikely to be utilised in a recovery application	Where street sweepings and cleansing wastes are deposited directly within the landfill void
Non-hazardous Industrial Wastes		Unlikely to be utilised in a recovery application	Where non-hazardous industrial wastes are deposited directly within the landfill void
Stable Non-Reactive Hazardous Waste (SNRH)		Up to 5,000 tonnes annum ⁵	Will not be utilised in a recovery application

Thus, as is evident from Table 1.4 , that residual MSW only contributes to a portion of the non-hazardous waste tonnage that the Applicant is seeking permission to accept.

For the majority of these non-hazardous wastes, landfill remains the only treatment option available, for example, street sweepings and cleansing wastes, non-hazardous soil and stone and other C&D waste and non-municipal bulk wastes.

⁴ Where Class R13 of the Third Schedule of the Waste Management Acts 1996 to 2011, is "Storage of waste pending any of the operations numbered R 1 to R 12 (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)" where it could be followed by a Class R5 recovery operation

⁵ Not to exceed 49,999 tonnes over the lifetime of the facility.

The term “residual MSW” can have many meanings, such as separately collected “black bin waste” or the residual fraction remaining after “black bin” and “dry recyclables” are pre-treated prior to recovery. This residual MSW fraction mainly consists of fines, non-recyclable and non-combustible wastes and landfill disposal is the only treatment option for these wastes. The Applicant fully supports the treatment of waste accordance with the Waste Hierarchy.

However, if the Board was to decide to place a limit of the quantity of residual MSW to be accepted for disposal, the Applicant requests that any limit imposed would be on “black bin” waste prior to pre-treatment only, because as outlined above, there are many waste fractions produced through the pre-treatment of “black bin” and “dry recyclables”_waste prior to recovery that are referred to as residual MSW that are only suitable for management in landfill.

If the Board did decide to place a 188,000 tpa limit of the acceptance on residual MSW “black bin” waste, the Applicant is still seeking permission for the acceptance of 290,000 tpa of other non-hazardous wastes as outlined in Table 1.4, such as soil and stone, etc.

The Regions have recommended that *“the proposed tonnage limit be kept under review, with the first review taking place after three years, to allow for prevailing conditions at that time, which may justify a different tonnage limitation.”*

The Applicant accepts the concept that a limit be placed by the Board on the acceptance of residual MSW providing that it is understood that the limit applies to “black bin” waste prior to pre-treatment only. Accordingly, the suggestion that a review be undertaken after three years is not necessary.

Capacity provided by export

In 2016 approximately 300,000 tonnes of RDF was exported from Ireland to destinations such as the Netherlands, Germany and Sweden. In 2019, Ireland is on course to export in the region of 120,000 tonnes of RDF to the Netherlands.

Earlier this year a large portion of the capacity of the municipality owned AEB incinerator in Amsterdam was shutdown indefinitely, due to what has been widely reported as technical defects. The AEB incinerator process up to 1.4M tonnes of waste annually and it primarily services the local Amsterdam market and waste imported from the UK. As a result of the shutdown of the AEB facility, Dutch authorities have been forced to commence landfilling local waste.

In order to address the local waste capacity situation, the Dutch government is proposing either to :-

- a. imposition of an import tax on waste brought to Dutch incinerators, or
- b. temporarily ban waste imports.

The net result of the imposition of either import taxes or a short-term embargo would be that the economic and therefore the flow of waste exports will be severely disrupted.

As approximately 120,000 tonnes of Irish waste is disposed of in Dutch incinerators annually, the imposition of a tax or ban on waste imports will have a significant impact on the Irish waste market and will greatly exacerbate existing capacity issues, as highlighted by the DCCAE letter of the 21st of June. In addition to the situation in the Netherlands, there is also a proposal from Swedish authorities to impose a €7.50/t tax.

The situation that has arisen with AEB highlights the fact that incineration capacity can on occasion fail and that domestic capacity to dispose of waste must be retained.

That contingency capacity of 44,000 tonnes per annum be maintained at the facility

The objective seeking contingency capacity is articulated in the Waste Management Plans under Policy E10: *“the waste plan recognises the need for ongoing disposal capacity to be available in response to events which pose a risk to the environment and/or health of humans and livestock. The local authorities of each region will monitor available contingency capacity annually.”*

The concept of contingency planning is a new departure in the management of waste and in the management of facility capacities. However, careful consideration is required to understand the circumstances that would give rise to triggering the use of this capacity and how the development of the capacity is funded.

The requirement to trigger the use the contingency capacity will either come from the Regions, who through their wider knowledge of the sector anticipate that there may be a shortfall of waste disposal capacity in a calendar year or from the operator of the landfill (the Applicant), which through the course of its normal business believes that customer requirements will not be satisfied. In any event the Regions will review and assess the demand for landfill (including Recovery requirements) and advise whether contingency capacity should be activated. To facilitate a rapid response to market shocks, it is agreed that the grant of permission sought from the Board on this application should authorise a maximum contingency tonnage of 44,000 tpa (within the overall waste acceptance sought of 440,000 tpa) which may be used to provide for contingencies in consultation/agreement with the Regions.

That the acceptance of IBA for storage pending recovery be restricted to 5 years, with flexibility for extension

The Applicant has proposed to accept IBA under 3 scenarios:

- A. Placement in the dedicated ash repository section of the proposed development.
- B. The placement in the landfill, or
- C. The treatment of IBA prior to re-use

The Applicant's intention is to convert IBA into a marketable product, suitable for use as a virgin aggregate replacement within the circular economy. The deposition, and use, within the landfill greatly reduces the possibility of further use, whereas placement within a "monofill" repository fully retains the potential of IBA for beneficial circular economy reuses.

Storage, pending recovery, is consistent with the Region's Waste Management Plans and specifically with Plan Policy E2: i.e. *"The region will promote sustainable waste management treatment in keeping with the waste hierarchy and the move towards a circular economy and greater self-sufficiency."*

As the Regions' submission identifies, the use of the IBA material outside of authorised waste facilities requires that IBA achieves End of Waste (EoW) status. Whilst there is widespread precedence across mainland Europe for the beneficial re-use of incinerator bottom ash, there is no such precedent in Ireland. Factors such as - Building Regulations, recent buildings materials litigation, and the absence of aggregate taxes, have all contributed to the lack of a circular economy solution for IBA in Ireland. While these factors are outside the direct control of the Applicant, the Applicant intends to use its best endeavours to re-purpose the IBA into the circular economy.

To arrive at a point where IBA can be placed into the circular economy, as a resource, an application to the EPA will have to be made under Article 6 of the EU Waste Framework Directive (2008/98/EC), as amended by Directive (EU) 2018/851 of 30 May 2018. This legislation specifies the grounds for determining that a material recovered, or recycled, from waste can be deemed to be no longer a waste i.e. have achieved EoW status. In order to satisfy the requirements of the Directive, the Applicant will have to demonstrate, to the satisfaction of the EPA, that:

- IBA can be commonly used for specific purposes.
- The substance fulfils the technical requirements for specific purposes and meets the existing legislation and standards applicable to products, and
- Its use will not lead to overall adverse environmental or human health impacts.

In addition to the environmental requirements, for IBA to be used as an aggregate replacement it will have to meet strict criteria set out for building materials, for example; IS EN 12620:2002 Aggregates for Concrete.

To satisfy the above building and environmental requirements, several trials will need to be completed in order to demonstrate that the processed material would achieve EoW status and be suitable for beneficial uses other than in the landfill. It is envisaged that the process to achieve EoW status will be rigorous, scientific, and time-consuming, but ultimately sustainable. For this reason, the Applicant acknowledges that the five years limitation on the storage period, as recommended in the Regions' submission, is helpful.

If the processed IBA is incapable of achieving EoW status, by reason of regulatory constraints, or is incapable of becoming a commercially viable product, the Applicant requests that the stored IBA be permitted to remain in the repository.

A prohibition on the placement of baled recyclables in the landfill void and a restricted timeline be applied on the period of storage of baled recyclables

The Applicant has proposed in Section 2.3.1 of the EIAR that one of the uses of the Biological Treatment Building (Section 2.6) would be the contingency storage of baled recyclables and of baled MSW.

The Applicant accepts the Regions' recommendation that there should be a prohibition on the storage of baled recyclables in the landfill void.

The Application understands the requirement for a restricted timeline on the storage of baled recyclables and submits that such timelines are more appropriately dealt with under the waste licence but in any event should not be longer than six months. In the case of baled MSW or Refuse Derived Fuel (RDF) the Applicant accepts that a maximum storage time of three months would be appropriate.

The Applicant is requested to clarify why there is no consideration in the EIAR of the proposed development at the Drehid landfill facility currently before the Board for consideration (PL09.300506) and which, if permitted could have implications for the future waste management scenario.

Pursuant to the requirements of the EIA Directives,⁶ in preparing an EIAR, an applicant for development consent is required to include information in respect of, inter alia, "the cumulation of effects with other existing and/or approved projects". It is understood that the reference in the Board's letter to the Drehid landfill facility involves a development proposal which is neither an existing project nor an approved project.

Indeed, it is further understood that the Board convened an oral hearing on the application for permission in respect of the proposed development at Drehid landfill in March 2019. Accordingly, there was no obligation to include information on the proposed development at the Drehid landfill facility in the EIAR submitted in respect of the proposed development to the Knockharley landfill facility.

The application for the Drehid landfill facility was submitted in December 2017 while the EIAR process for the proposed Knockharley development was underway. Certain matters occurred during the early consideration by the Board of the Drehid application that created some doubt over the continuation of the planning process. Accordingly, the Applicant took a view that the Drehid application was only a proposal and not confirmed additional waste management capacity in the system.

However, in determining the need for the proposed Knockharley development, the Applicant fully considered the current permitted waste acceptance tonnage at Drehid (in other words, the existing Drehid development) as is outlined in Table 4.9 – Chapter 4 of the EIAR. Moreover, in circumstances where the EIAR submitted in respect of the proposed Drehid development is now available (it was not available at the time when the Applicant completed the EIAR in respect of the proposed Knockharley development), the Applicant has undertaken additional appraisals of the likely significant impacts of the proposed Drehid development in cumulation with the proposed Knockharley development.

The Waste Management Planning Regions actively track waste generation and disposal and recovery capacity.

⁶ Directive 2011/092/EU (codified) as amended by Directive 2014/052/EU.

The most recent information made available by the Regions indicates that there is and will continue to be demand for landfill disposal capacity. The purpose of the proposed Knockharley development is to ensure that there is adequate capacity in all approved facilities (of which Knockharley is one) to manage forecast arisings nationally.

Recent communications from the Waste Management Planning Regions support the need for landfill disposal capacity as outlined hereunder.

	2019	2020	2021
MSW Total	3,022,459	3,149,511	3,214,962
Recycling Rate	42%	43%	45%
Balance for Treatment/Disposal	1,747,989	1,784,723	1,784,304
National Capacity	1,444,000	1,534,000	1,554,000
Minimum Export Requirement	303,989	250,723	230,304

Extract from Waste Treatment Capacity Analysis – Q4 2018 Bulletin & Projections 2019 prepared by the Waste Management Planning (WMPLA) Regional Coordinators

A second communication from the Regional Coordinators dated 18 June 2019 provides a forecast to 2030 which further demonstrates an ongoing requirement for capacity to handle residual MSW. The shortfall is largely fulfilled through RDF export.

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total MSW Projections	3,022,459	3,149,511	3,214,962	3,282,084	3,350,941	3,421,598	3,494,122	3,568,584	3,615,820	3,663,702	3,712,247	3,761,472
% Recycling	42%	43%	44%	46%	47%	48%	49%	50%	52%	53%	54%	55%
Residual waste for Treatment or Disposal	1,753,026	1,795,221	1,800,379	1,772,326	1,775,999	1,779,231	1,782,002	1,784,292	1,735,594	1,721,940	1,707,634	1,692,663
Treatment Capacity in Ireland	1,444,000	1,465,000	1,395,000	1,475,000	1,495,000	1,505,000	1,505,000	1,505,000	1,505,000	1,505,000	1,505,000	1,505,000
Poolbeg	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Indaver	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Cement Kilns	270,000	300,000	320,000	400,000	420,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000
Landfill	369,000	360,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000
			65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
Export requirement	309,026	330,221	405,379	297,326	280,999	274,231	277,002	279,292	230,594	216,940	202,634	187,663

With regard to the capacity listed by the regions the Applicant makes the following observations:

Landfill

With respect to non-hazardous landfill, significant changes in capacity are forecast in the short-term with existing planning permissions due to expire in both Knockharley (2021) and Ballynagran (2020). The expiry of the Knockharley permission would remove 88,000tpa of permitted disposal capacity from the market and the expiration of Ballynagran would remove 150,000tpa of permitted disposal.

In such a scenario, the Regions' forecast 270,000tpa of landfill capacity for disposal being available beyond 2021 is an overestimation. The existing available information is that the only operable capacity is that of the Drehid Landfill which is currently operating at a maximum of 120,000tpa per annum. The current application before the Board in respect of Drehid seeks to retain this 120,000tpa and add an additional 45,500tpa of stabilised biowaste and 200,000tpa of IBA.

Both the Applicant and Drehid are seeking permission for the acceptance of IBA. The Applicant is seeking permission for the acceptance of 150,000 tpa.

The Applicant's sister company enjoys the benefit of an existing 120ktpa contract with the largest producer of IBA in Ireland and hence the justification for proposing the IBA facility at Knockharley. The contract is for a minimum term of 10 years and requires the Applicants' sister company to process and manage the IBA. This ensures security of supply to Knockharley. The capacity to manage the IBA fulfils the principles of self-sufficiency and proximity enshrined in European legislation. In addition to this particular major source of IBA the Applicant also manages quantities of IBA from another producer in accordance with shorter term contracts. It is also worth pointing out that Knockharley is located in closer proximity to the origin of the IBA than Knockharley.

As was mentioned in the response to point 3 of Query 1 the RFI, the ability to accept IBA provides both a domestic outlet in the short-term but also the opportunity to progress to End of Waste status through processing, testing and trialling.

In the event that the Drehid application is approved for the continued acceptance of 120,000t of MSW and an additional 45,500t of stabilised MSW (fines), this permitted quantity of waste for acceptance at Drehid could constitute the entire national landfill capacity for MSW because, by 2021, it is possible that both Knockharley and Ballynagran could be closed. In such a scenario, the unallocated tonnage increases to 401,826t comprising the 297,326t (Export Requirement) plus the shortfall in landfill of 104,500t (270,000 less 165,500t).

This unallocated 400kt suggests that there will be demand for both export and landfill; the demand for landfill being a function of the export capacity (and availability). In this context the tonnage limit proposed by the Regions of 188,000t satisfies less than 50% of the unallocated national tonnage leaving export as the sole remaining solution for the balance.

The exportation of large volumes of waste outside Ireland runs counter to EU environmental policy and, in particular, the proximity principle (i.e., waste should in general be treated and disposed of close to where it was produced).

In this context, the continued export of RDF, a derivative of MSW, is dependent on the availability of capacity abroad. Notably some EU member states do not accept imports of RDF or MSW (e.g. UK) while others are considering imposing import taxes to deter imports and preserve capacity for domestically generated wastes.

For example, The Netherlands have a proposal before its parliament to impose a waste import tax of circa €32/t, to be applied from January 2020. Because the Dutch are the largest importer of waste within the EU, at circa 1.8 million tonnes per annum, the imposition of such a tax would have significant impacts on Ireland's cost of export of rMSW. In such a scenario it is vital that Ireland has adequate approved capacity to be self-sufficient in line with national policy.

In conclusion, the Applicant believes that there is sufficient MSW and derivatives of MSW in the market to justify the approval of the non-hazardous wastes' capacities sought. In relation to IBA, the Applicant submits that Knockharley Landfill represents the strongest solution for this waste stream as it seeks to achieve End of Waste and thus cease landfilling ultimately. Also, the fact that a sister company of Knockharley Landfill has a contract for the IBA with the largest producer of the material would indicate that this project would be delivered if approved.

Cement Kilns

It should be noted that, in the Applicant's submissions, there is a misapprehension as to whether the process undertaken in cement manufacture is "incineration" of waste. However, the Industrial Emissions Directive defines a "waste incineration plant" as:

any stationary or mobile technical unit and equipment dedicated to the thermal treatment of waste, with or without recovery of the combustion heat generated, through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated...

It is clear that the operation of cement kilns does not relate to incineration of waste, as understood and defined by the Industrial Emissions Directive and that cement kilns do not constitute a "waste incineration plant". Rather they use SRF as a substitute fuel in the production of cement.

In addition, it is the Applicant's understanding that there remains considerable overcapacity in cement production in Ireland and much cement produced in Ireland is currently exported for use in the UK market.

A further issue with SRF in the cement plants is the fact that the industry, to date, has struggled to meet its own projected targets for SRF consumption. Cement kilns commenced the use of SRF in 2009. Since this time SRF use is fully authorised in 4 cement kilns operating in Ireland. Despite a number of authorisations being received, SRF usage has stagnated at circa 200,000 tonnes for a number of years.

The Applicant remains sceptical of the ability of the cement kilns to provide the Residual Waste Treatment capacity of 430,000 tonnes per annum on a sustained and consistent basis.

The combination of the risks posed by market factors and the slow up take of SRF, in the view of the Applicant, makes overreliance on the domestic cement industry, without provision of adequate contingency, perilous.

Other Capacity

65,000 tonnes referred to in the Regional Waste Management Plan Projections.

There is a capacity of 65,000 tonnes referred to in the Region's Projections. It is the understanding of the Applicant that this capacity refers to a facility located near at Derryclure, Tullamore. Whilst this facility has achieved planning and is authorised by the EPA (W0282-01), the Applicant is of the opinion that this capacity will not come into operation as the technology proposed at the facility is gasification. As evidenced across Europe, gasification remains a problematic technology from both technical and commercial perspectives.

Export

The export of waste derived from MSW (known as Refuse Derived Fuel, RDF) has developed in the first instance as a means of avoiding landfill tax by availing of cheaper gate fees in continental Europe and in the second instance as a means of managing that portion of MSW that could not be managed within Ireland. The sustainability of the export option is largely dependent the availability of capacity abroad at an economic gate fee. Regulatory changes in the countries of destination with regard to incineration taxes could adversely affect the economics of export.

Also, the seasonal variability of off-take by Scandinavian outlets creates uncertainty and can lead to increased stocks of RDF in summer months in Ireland. Finally, the exportation of large volumes of waste outside Ireland runs counter to EU environmental policy and, in particular, the proximity principle (i.e., waste should in general be treated and disposed of close to where it was produced).

Appendix 1

Capacity for Managing Residual MSW Waste



ENVIRONMENTAL BALANCE IN DESIGN AND CONSTRUCTION



21st June 2019

RE: Capacity for managing residual MSW waste

The Irish waste sector continues to experience capacity issues on an ongoing basis, with residual MSW in particular requiring continued monitoring and careful management.

In light of ongoing concerns in this regard, the Department of Communications, Climate Action and Environment asked the three Regional Waste Management Planning Offices (RWMPOs) to examine the availability of contingent capacity for residual municipal solid waste (rMSW). The RWMPOs produced a feasibility study on the ability of the local authority sector to provide contingent capacity in the State which was presented to the Department in mid-2018. This study has identified a number of candidate sites which have the potential to provide contingent capacity and the Department is currently discussing these options with the relevant local authorities.

The Report by the RWMPOs also envisaged a number of additional initiatives, including engagement with the private sector to ascertain its ability to provide contingent capacity for rMSW.

With the impending closure of the East Galway landfill site, all remaining operating rMSW licenced facilities in the State will shortly be operated by the private sector. The waste industry therefore has a pivotal role to play in the provision and management of waste on an ongoing basis.

The Department of Communications Climate Action and Environment seeks to engage with the waste industry in Ireland to consider how contingent capacity for residual MSW might be provided by the sector.

This engagement may seem counter intuitive in the current circumstances, whereby industry can just about meet demand. However, in order to fully assess and inform a business case on the potential provision of contingent capacity for rMSW, all possibilities must be explored, including those which may not be feasible under current circumstances or in the current legislative environment.

The Department invites all interested parties who may be in a position to provide contingent capacity to submit proposals to the Department for consideration. Attention should be given to issues such as planning permissions and licence conditions, including any implications for existing or future Environmental Impact Assessments when preparing such a proposal.

The Report by the RWMPOs recommends the provision of at least 150,000 tonnes of contingent capacity for rMSW and related waste streams. When submitting a proposal, please specify the following details;

1. Legislative or administrative changes required,
2. Time frame for delivery,

3. Other waste streams which could also be accommodated if a higher contingent capacity could be provided.
4. Cost of delivery.

Proposals should be submitted by close of business on Friday 19th July at the latest.

The objective of this engagement is to establish whether the Irish Waste Industry can provide some or all of the contingent waste capacity required by the State at this time.

This is not a Request for Tenders.

Please do not hesitate to contact me if you require any clarification on this matter.

Yours sincerely,



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