Fingal County Council Comhairle Contae Fhine Gall



16<sup>th</sup> October 2007

Dr Ian Marnane, Inspector, Office of Licensing & Guidance, Environmental Protection Agency, Headquarters, PO Box 3000, Johnstown Castle Estate, County Wexford.

#### Re: WO231-01, Proposed Fingal Landfill

Dear Dr Marnane,

https:// any other Please find objections to the Proposed Decision on the Fingal Landfill Waste License W0231-01 and a cheque in the sum of €500,00 payable to the Agency in accordance with the requirements of Section 42 and A of the Waste Managements Acts 1996 to 2005. Cone

Yours Sincerely,

M Kiel

Martin Kiely, Senior Executive Engineer

Tel: (01) 890 6262

**Environment Department** P.O. Box 174. County Hall, Swords, Fingal, Co. Dublin

An Roinn Seirbhísí Comshaoil Bosca 174, Áras an Chontae, Sord, Fine Gall, Contae Átha Cliath

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# **Waste Licensing**

## Waste Disposal Activities (Landfill Sites)

Application by Fingal County Council for Waste Licence Application W0231-01 for Fingal Landfill, Co. Dublin



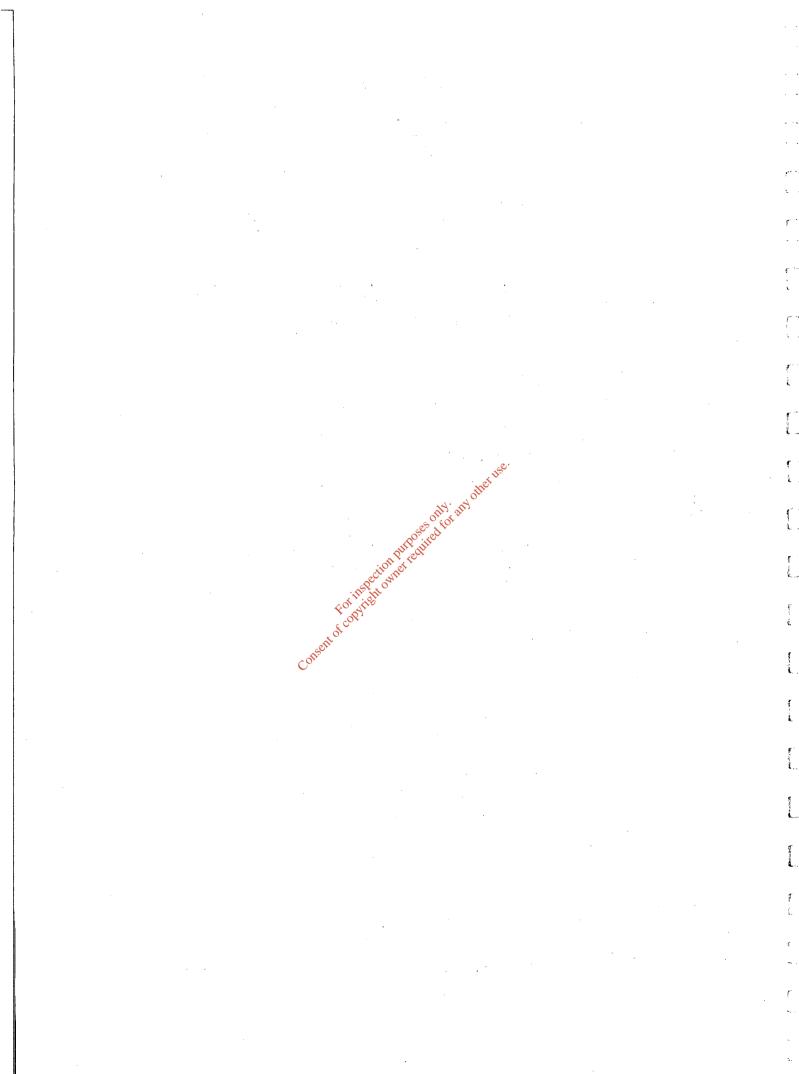


**Fingal County Council** 

Comhairle Chontae Fhine Gall Fingal County Council

### **Objections to Waste Licence Proposed Decision**

October 2007



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# **Fingal Landfill**

## Objections to Proposed Decision for Waste Licence Reg. No. W0231-01

# DOCUMENT CONTROL SHEET

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Project Title	Fingal Land	Ifill Forpy	ço			
Document Title	Objections	Objections to Proposed Decision for Waste Licence Reg. No. W0231-01				
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This Document Comprises	DCS	тос	Text	List of Tables	List of Figures	No. of Appendices
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F01	Final Issue	Eleanor Boland	Conrad Wilson	Larry O'Toole	Carnegie House	15/10/07
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### **Consulting Engineers**

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### OBJECTION TO WASTE LICENCE PROPOSED DECISION W0231-01 UNDER SECTION 42 OF THE WASTE MANAGEMENT ACT, 1996 TO 2005.

#### **GROUNDS FOR OBJECTION**

Fingal County Council of PO Box 174, Fingal County Hall, Main Street, Swords, County Dublin, as the Licensee of Fingal Landfill wish to object to certain conditions of the Proposed Decision on an application for a Waste Licence (Waste Licence Register No. W0231-01) issued by the Environmental Protection Agency on 20<sup>th</sup> September 2007.

The specific objections are set out in the following sections.

#### TIMELINES FOR SUBMISSIONS

With regard to all of the following Conditions, which require submissions to be made to the Agency within a certain timeline:

- Condition 2.2.2.8
- Condition 2.2.2.9
- Condition 3.25.1
- Condition 6.6.5
- Condition 6.15.3
- Condition 6.31
- Condition 6.35.1

It is requested that the Agency consider the wording of these conditions and remove the text 'within XXX months of the date of grant of this licence' and consider replacing this wording with 'prior to the acceptance of waste at the facility' or 'XXX months prior to the acceptance of waste' at the facility or 'XXX months after the acceptance of waste at the facility' as appropriate.

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The planning process for the landfill is still underway and a decision has not been made to date by An Bord Pleanala. The timescale for this decision is unknown at this time. Therefore it is requested that the Agency do not impose timescales relating to the granting of the waste licence but consider applying them to the timescale for the actual operation of the site.

#### CONDITION 3.7.1 (II)

With regard to Condition 3.7.1 (ii) of the Proposed Decision, it is requested that the Agency considers amending the wording of the condition which reads:

'A geotextile protection layer placed over the HDPE layer (the choice of geotextile is to be proven by cylinder testing – submitted as part of the Specified Engineering Works identified in Condition 3.6)'

The requirement to provide details on the proposed geotextile and the respective cylinder test as part of the Specified Engineering Works is not possible since this would require that all specific materials used in the works are determined at this early stage in the site development. The proposed development at Fingal is a greenfield site and it is predicted that the construction of the facility will take

approximately twelve months. Cell lining may not commence until ten months into the development, depending on scheduling which has not been considered in detail at this stage. Providing such detail up to one year before it is required will not be feasible since availability of suitable sources of leachate stone may vary depending on the workings of local quarries and how their available products combine with various geotextiles and HDPE liners. It is requested that the Agency considers amending this condition to reflect this and allow the condition to read;

'A geotextile protection layer placed over the HDPE. (The choice of geotextile, in combination with the HDPE and the leachate stone is to be proven by cylinder testing and the testing to be provided as part of the CQA report.)'

#### CONDITION 3.7.1(III)

With regard to Condition 3.7.1 (iii) of the Proposed Decision, it is requested that the Agency considers amending the wording from;

A 500mm thick drainage layer placed over the geotextile layer with a minimum hydraulic conductivity of 1 x 10-3 m3/m2/s, of pre-washed, uncrushed, granular, rounded stone (16-32 grain size) incorporating leachate collection drains'

It is requested that the term '*pre-washed*' is deleted since while it may be an advantage for removing some fine particles the degree of pre-washing is not quantifiable and may be subjective. It would be more appropriate to consider the insertion of a stone sample grading curve, with a limit on the % of finer material in the sample, for example 0-5% passing the 10mm British Standard Sieve Size. (see grading recommendation below)

It is requested that the term 'uncrushed' is deleted since while the sample may be essentially uncrushed after it is placed in the cell, the stone may crush down while waste is to being deposited or while being compacted and that it may be more appropriate to insert a minimum soaked ten % fines value of approximately 100kN. (See also grading recommendation below)

It is requested that the term 'rounded' is deleted and the passing cylinder test and the 10% fines value suffices for the stones suitability for use in the blanket. If rounded is to be maintained it is requested that 'sub-rounded' is added also.

It is requested that the stone size specification of *16-32mm grain size* be deleted and replaced with a grading that reflects BS Sieve Sizes (mm) as used in the NRA Specification for Road Works and would be standard at Irish quarries. It would be suggested that the range of stone allowed should be between 10 -40mm with an allowance for below 10 mm (recommended 5% plus 2% for crushing post placement).

#### CONDITION 3.7.2

With regard to Condition 3.7.2 (ii) of the Proposed Decision, it is requested that the Agency considers amending this condition which states;

A drainage layer shall be placed below the lining system so that shallow perched groundwater can be pumped during the construction and initial filling of the cells. The drainage layer shall comprise:

(i) a geotextile layer separating the engineered mineral liner from the drainage medium;
(ii) up to 1 metre thick of gravel incorporating slotted collection pipes;
(iii) a pumping system from the drainage layer to the surface water management system.

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It is requested that the Agency consider the following;

The condition is defining a pumped system where a gravity system may possibly be more appropriate. Borehole logs do not indicate the presence of natural in-situ drainage layers, as such any ground water flows are likely to be small in volume during construction and post construction. Higher volumes of ground water during construction, if present, are likely to come from springs that may develop once the cells have been excavated. Under these conditions the preferred solution is to create a piped drainage system to intercept and direct these springs to a traditional herringbone subsurface drainage network. If ground water flows are found to be significant during construction or are predicted to pose a threat to the underside of the lining system post construction, then consideration of a drainage layer may be appropriate.

We request that this condition be modified to the following:

A drainage system shall be placed below the lining system as required. The drainage system shall comprise:

(i) A geotextile layer separating the engineered mineral liner and/or in-situ materials from the drainage system;

(ii) A drainage system beneath the engineered mineral liner incorporating slotted collection pipes and drainage envelop if required;

(iii)A delivery system conveying subsurface flows from the dramage system to the surface water management system.

#### CONDITION 3.13.2

With regard to Condition 3.13.2 of the Proposed Becision, it is requested that the Agency considers amending the wording that;

'all water from the wheel cleaning area shall be directed to the leachate management system.'

It is requested that only the water from the waste vehicle wheelwash be directed to the leachate treatment system and the water from the wheelwash for the construction vehicles be allowed to be diverted into the surface water management system. During the initial construction the wheelwash for the construction vehicles will be constructed initially and the leachate treatment system will not be available until the completion of the works. During the lifetime of the site the construction phase areas will remain separate from the waste acceptance and landfilling areas and therefore there will be no requirement to treat run-off from the construction haul roads or vehicles at the leachate treatment plant.

#### CONDITION 3.14.1

With regard to Condition 3.14.1 of the Proposed Decision, it is requested that the Agency considers amending the wording 'or as may be varied by a licence condition' to 'unless otherwise agreed with the Agency.'

#### CONDITION 3.15.1

With regard to Condition 3.15.1 of the Proposed Decision, it is requested that the Agency considers amending the wording 'or as may be varied by a licence condition' to 'unless otherwise agreed with the Agency.'

#### CONDITION 3.15.3

With regard to Condition 3.15.3 it is requested that the Agency consider that the generation of electricity from landfill gas may not be practicable in the future if waste streams change and separation of waste at source diverts organic material from going to landfill. Furthermore this condition may conflict with future restoration and aftercare models that may, for example, require development of an aerobic bioreactor, the by-product of which is carbon dioxide and not methane.

It is requested that this condition be amended to the following:

The Licencee shall review the feasibility or otherwise of using landfill gas collected at the site for the generation of electricity within 12 months of granting the licence. Thereafter the utilization or other use of landfill gas shall be shall be reported annually as part of the AER.

#### CONDITION 3.24

With respect to Condition 3.24 of the Proposed Decision, it is requested that the Agency considers amending the wording so that all surface water from hardstanding areas within the waste acceptance areas and associated car parks only should pass through an oil interceptor and then to the surface water management system. Where vehicles do not travel or park, and there is no risk of petrol or oil contamination, there should be no requirement for an oil interceptor.

It is proposed that surface water from the capped areas of the landfill is discharged directly to the surface water management system and is not required to pass through an oil interceptor. The requirement for a silt trap is met with the installation of a fully managed surface water attenuation system.

For the purposes of clarity it is requested that the wording 'storm water discharges' be amended to 'surface water run-off'.

#### **CONDITION 3.27**

It is requested that the Agency consider amending the wording of Condition 3.27 from:

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The provision of a catchment system to collect any leaks from flanges and valves of all over ground pipes used to transport material other than water shall be examined. This shall be incorporated into a schedule of objectives and targets set out in Condition 2.2.2.2 of this licence for the reduction in fugitive emissions.

To;

An assessment shall be carried out to determine the risk, impact and appropriate measures to mitigate the risk of leaks from flanges and valves of all over ground pipes used to transport material other than water. In the event that a catchment system is required details shall be incorporated into a schedule of objectives and targets set out in Condition 2.2.2.2 of this licence for the reduction in fugitive emissions.

#### **CONDITION 3.28**

It is requested that the Agency amend the word 'adequately' to 'reasonably' in order that the Condition reads;

'All wellheads shall be reasonably protected to prevent contamination or physical damage'.

#### **CONDITION 6.2.2**

With respect to Condition 6.2.2 of the Proposed Decision, it is requested that the Agency consider amending the wording of the condition from:

The level of leachate in the pump sumps shall be monitored as outlined in Schedule C.2.3 Leachate Monitoring, of this licence

To;

The level of leachate in the cell leachate collection system shall be monitored as outlined in Schedule C.2.3 Leachate Monitoring, of this licence.

This change is requested so that alternatives to 'pumping' systems may be considered by the Agency.

#### **CONDITION 6.2.5**

It is requested that the Agency considers adding 'unless otherwise agreed with the Agency' to the end of Condition 6.2.5, in order to allow advances and variants in landfill engineering be considered without the requirement for a licence review. It is requested that the wording be amended from;

Recirculation of leachate or other contaminated water shall only be undertaken within cells which have been lined to the satisfaction of the Agency. Recirculation shall not commence at a cell until the final capping for that cell is in place.

To;

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Recirculation of leachate or other contaminated water shall only be undertaken within cells which have been lined to the satisfaction of the Agency Recirculation shall not commence at a cell until the final capping for that cell is in place, unless otherwise agreed with the Agency.

#### CONDITION 6.4.4

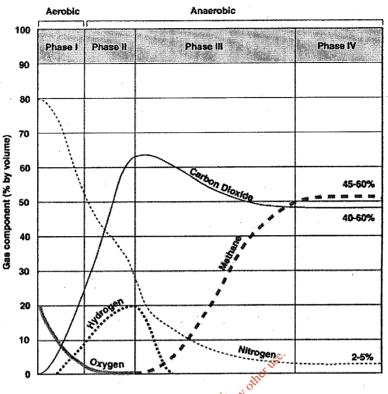
It is requested that the Agency consider amending the wording of Condition 6.4.4. It states:

In order to minimise release of untreated landfill gas, the landfill gas flare shall be capable of operating with a gas support fuel (e.g. natural gas) to allow effective treatment of landfill gas in the event that the landfill gas itself cannot support combustion. Alternative appropriate techniques may be employed with the written prior approval of the Agency.

Natural gas can be used in two ways to supplement the flare operation:

- As a primary fuel to supplement methane in landfill gas burner when concentrations fall below 25% v/v
- As a supplement to facilitate pilot ignition when concentrations fall below 25% v/v.

For current municipal waste streams with a high organic content, low methane concentrations will have most impact during Phases I and II (refer to diagram below) during initial filling, and subsequent to Phase IV in the restoration and aftercare period. Furthermore if organic content reduces as a result of waste being pre treated prior to disposal then this may be a significant problem during the transition phase if the landfill is degrading under anaerobic conditions. This means that a supplemental fuel may need to be used to operate enclosed flares under the low methane concentrations for many years. The use of natural gas to supplement burner operation flares however is to be avoided, and should not be obligatory in the context of the licence. It makes little sense environmentally to use large amounts of fossil fuels to manage odorous compounds.



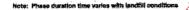


Figure 1: Typical Landfill Gas Production From a Municipal Landfill

When considering the requirement to supplement the methane with another fuel to pilot the burner the flexibility would be preferred to use inline carbon filters between blower and burner with a propane supplemented ignition source and a manual override on the flare to facilitate flaring at 14% v/v. This will allow control of odours and oxidation of available  $CH_4$  above 14% albeit not at 1000°C for 0.3 seconds. Unfortunately it will not be possible to implement this policy under condition 6.4.3 which states "Flares shall be operated to ensure a burn chamber residence time of minimum 0.3 sec and burn temperature of minimum 1000°C."

In addition a variety of landfill gas flare sizes, and number of flares, will be utilised during the lifetime of the site and will accommodate turn-down ratios to allow destruction of low levels of landfill gas.

It is requested that this condition be changed to the following:

In order to minimize release of untreated landfill gas, the landfill gas flare shall employ appropriate technologies to mitigate the impact of odours subject to the written prior approval of the Agency.

#### CONDITION 6.6.1

It is requested that the Agency consider the wording of Condition 6.6.1 and consider revising it on the following basis. When the majority of leachate treatment technologies such as Sequential Batch Reactors (SBR's), or aeration systems are working correctly no odours are present. When covers are added to some technologies, such as SBR's temperatures may be raised, particularly during the summer months and these high temperature conditions may impact upon microbial breakdown of leachate. It is requested that the Agency consider allowing the facility to install covers on SBR tanks to allow for odour management provision but with a caveat that allows the operators to open covers to atmosphere if high temperature conditions are generated and the treatment system cannot operate effectively unless temperature is reduced. This would only be permitted if odour was not an issue.

It is requested that this condition be changed to the following:

Leachate holding tanks/lagoons/sumps shall be effectively sealed. There shall be no direct emissions to air from the leachate treatment system unless otherwise approved. Headspace gases from the treatment/holding tanks shall be vented to an appropriate odour abatement system prior to release to atmosphere. The proposed treatment method shall be agreed by the Agency prior to commencement of waste acceptance at the facility.

#### CONDITION 6.13.2

The proposed decision allows for the disposal of 500,000 tonnes of waste per annum. This approximates to 2,000 tonnes per day. The proposed decision requires that the dimensions of the working face are as follows;

The working face of the landfill shall be no more than 2.5 metres in height after compaction, no more than 25 metres wide and have a slope no greater than 1 in 3.

It is requested that the Agency consider amending this condition to allow for a larger working face to accommodate the volume of waste intake at the site and also to consider that horizontal gas management systems may be utilised in order to mitigate odougat the working face.

It is requested that the dimensions be increased or that the condition be changed to the following:

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Proposals regarding the width, height, slope and cover arrangements for the landfill working face shall be agreed with the Agency prior to waste acceptance at the facility.

#### **CONDITION 6.34**

It is requested that the Agency consider amending the wording of condition 6.34 to include the wording *'unless otherwise agreed with the Agency'*. While retaining 10m of clay underneath the footprint of the cells the site holds the lowest risk level of a R1 response in the guidelines for response zoning matrix (DoEHLG/EPA/GSI, 1999).

#### CONDITION 8.1.2

It is requested that the Agency consider deleting Condition 8.1.2 as it is worded at present. The Condition states:

Prior to the acceptance of residual waste at the facility the licensee shall submit a proposal, for the agreement of the Agency, detailing the proposed pre-treatment method or combination of methods for all waste types. The proposed pre-treatment shall be prioritised as follows:

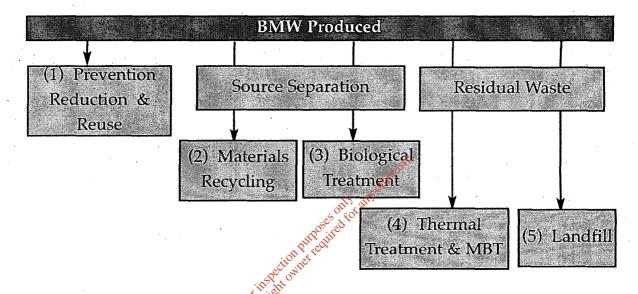
(i) Source segregation to include, in particular, segregation of recyclables and separate segregation of the biodegradable organic fractions (3 bin system or equivalent)

- (ii) Mechanical Biological Treatment (MBT)
- (iii) Energy Recovery

It is requested that the Agency consider the following:

That MBT does not form part of the Dublin Waste Management Plan 2005 and that Thermal Treatment (Energy Recovery) and MBT should be placed on an equal footing and do not take priority over each other. It contravenes National and European policy to give preference to MBT over Energy Recovery.

In the National Strategy on Biodegradable Waste, which outlines Government policy for the diversion of biodegradable municipal waste from landfill and builds upon the key objectives established in policy documents Changing Our Ways (1998), Delivering Change – Preventing and Recycling Waste (2002) and Waste Management; Taking stock and Moving Forward (2004) a summary of the strategy approach to the treatment of Biodegradable Municipal Waste is set out and is reproduced here.



Thermal Treatment and MBT are placed on an equal footing and do not take priority over each other. It contravenes National and European policy to give preference to MBT over Energy Recovery.

#### **Dublin Waste Management Strategy**

The basis for the current waste management policy for Dublin was announced in January 1998 and got a very favourable response at public and political level. For the first time new Environmental Awareness Officers were going to be appointed to give a tangible presence in terms of waste prevention at community, school, business and domestic level. New staff was hired to enforce the EU Packaging Directive to ensure that commercial and industrial enterprises source separated their waste and sent it for recycling. New regulation by-laws both household and commercial waste would pass through the respective councils on waste presentation, segregation at source, thresholds for sorting etc. In this way a new system for the regulation of the collection of all waste in the Dublin administrative area was set up through a series of permits issued to approved waste collection organisations overseen by Dublin City Council while waste treatment and disposal facilities would be operated under licence from the EPA. Of all of the waste management scenarios examined by the consultants in 1997 the one chosen for implementation was that of 'maximum realistic recycling and minimum landfill'.

In terms of household waste, the strategy adopted was to have less than 10% of that problematic waste stream going to landfill. That was in 1998 and this is precisely the objective which is now set in the Agreed Programme for Government some 9 years later. Fingal County Council along with the three other Dublin local Authorities feel that this target will be unachievable if an MBT route is pursued. The recommended scenario for the Dublin Region was tested on technical, environmental and economic grounds to ensure that it could reliably and robustly meet upcoming EU directives and indeed to set a new standard in terms of municipal waste management in Ireland. It was entirely consistent with the National Waste Policy 'Changing Our Ways' which was published later that year.

The recommended scenario for the Dublin Region included the following elements;

- Collection system; kerbside collection of recyclables with source separation in all four local authority areas supplemented with collection via bring banks and areas that could not be serviced by Kerbside Collection (like high rise apartments), provision of new recycling stations (e.g. Ringsend, North Strand) that catered for the delivery of recyclables by the public, source segregation and dual collection of organic waste as far as practicable – source separation of the waste stream for all private enterprises in accordance with new Waste Bye Laws to be enacted – source separation of harmful waste in the household waste stream.
- Treatment system; Increased Mechanical Baling capacity for residual waste disposal at Arthurstown. Provision of Materials Recovery Facilities (MRF) for clean recycling for both the public and private sector, garden waste composting to service the requirements of each of the four authorities, Biological Treatment of organic wastes in two regional facilities at Ballyogan and Kilshane, Thermal Treatment of residual combustible waste with waste to energy recovery (with maximum energy efficiency) facilities for priority wastes and harmful wastes collections from households, construction demolition waste facilities with maximum diversion of soil from landfill to conserve available capacity.
- Residual disposal systems. Landfill disposal of residual waste, to utilise and extend Arthurstown Landfill as far as practicable and the existing Balleally facility with a requirement for a new unbaled landfill facility to meet the region's requirements by 2011 (Fingal Landfill, currently in the planning process).

#### Regional Waste Plans

These strategy proposals were then transposed into a new Regional Waste Management Plan in 1999. The four Dublin authorities then set up a Waste Steering Co-ordination Group to implement the Regional Plan provisions drawn from the senior management of the four Dublin Authorities and representatives of DOEHLG. In 2007, all of the provisions of the Dublin Waste Management Plan have either been implemented or are going through the final stages of implementation. The Plan was reviewed in 2005 and sharpened up considerably in the waste prevention and recycling area to meet new challenges such as recycling challenges for higher rise apartments in the city area and awareness schemes to cater for the increasingly cosmopolitan and cultural diversity which is now in the Dublin region. The issue of MBT was again examined but not favoured in the Dublin context.

The 2005 Plan was approved at EU level and indeed substantial Cohesion Funding was awarded to the four Dublin authorities by the EU Commission for the appointment of Client Representatives (consultants) to develop the new biological and thermal projects. This Community Decision of 20th June 2003 further underpins the extent to which the Dublin Waste Management Plan is in total conformity with EU policy in addition to meeting all national requirements. PPP tender processes were instituted with respect to the Mechanical Sorting plant at Ballymount, the Biological Treatment plants at Ballyogan and Kilshane and the Residual Landfill in Fingal and they are all at various stages of planning and development.

The Mechanical Sorting plant at Ballymount is currently under construction and the Biological Treatment plants at Ballyogan and Kilshane have planning approval. The Thermal Treatment plant at Poolbeg and the Nevitt Landfill in Fingal are currently going through the final stages of the planning process.

On the basis of the submissions above it is requested that the Agency consider revising the wording of this Condition to reflect National and European Policy and the Waste Management Plan for the Dublin Region 2005 -2010 and consider deleting Condition 8.1.2. It is suggested that Condition 8.1.1 be amended to state:

'Only residual wastes, which have been subjected to pre-treatment, shall be accepted for disposal at the landfill facility'.

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#### SCHEDULE B

In Schedule B: Emission Limits, (Section B3, Emissions to Sewer) the Proposed Decision lists a number of parameters and maximum limits above which discharge will not be possible.

It is requested that the Agency considers that Fingal County Council set the discharge limit for the leachate to their own foul sewers and this was provided as part of the licence application and is as follows:

Parameter	Max daily average (mg/l)
Flow	200m <sup>3</sup> /day
BOD	<100
COD	<500
Suspended Solids	<600
NH4 N	<100
pН	6-10

It should be considered that primary treatment (most likely a sequence batch reactor system (SBR)) of the leachate will occur on site before discharge to the sewer for further treatment at one of the local waste water treatment plants. The threshold limits identified for a number of elements in Schedule B3 are considerably lower than the concentrations commonly found in typical leachate from Irish landfill facilities (Characterisation of Irish Landfill Leachate, Thesis - J Bourke, 2005, raw data from Arthurstown landfill, EPA landfill Site Design Manual page 48) and therefore the treatment of these metals at the landfill will be extremely difficult to achieve. It should be considered also that the maximum flow per day is only 200m<sup>3</sup> and therefore the total metal load to the WWPT is regarded as small in comparison with the flows treated at these plants every day. The following table identifies the heavy metals and their limits that the EPA are requested to consider amending or removing.

To achieve the limits set in the Proposed Decision it is likely that some form of heavy metal stripping would be required of the leachate. This requirement would appear to have little value as the leachate will be discharged to a sewer under the control of the Local Authority. In addition if these parameters are to remain in the licence it is requested that the requirement to monitor monthly be reduced to annually in Table C.3.2.

Parameter	Limit (mg/l)	EPA landfill site design manual		Characterisation of Irish landfills	
		Mean	Max	Mean	Max
As	0.5	0.034	0.485	Not recorded	
Cr	1.0	0.09	0.56	0.2	1.12
Cu	1.0	0.13	0.62	7.3	86
Ni	1.0	0.17	0.6	17.52	172
Zn	5	1.14	6.7	7.24	200
Pb	0.5	0.2	1.9	0.014	0.3
Hg	0.1	0.0002	0.0008	0.0012	0.0138
Cd	0.1	0.015	0.08	0.0017	0.021
СІ	2000	2074	4710	1150	9900

CN	1.0	Not recorded	26.3	263	
F	1.0	Not recorded			

It is requested that the Agency consider reviewing these discharge limits taking into consideration the new requirements that will have to be meet for treatment of these parameters in such low volumes of flow.

#### SCHEDULE C

In Schedule C: Control and Monitoring, (Section C6 Groundwater Monitoring) the Proposed Decision states that the following boreholes should be monitored;

Groundwater wells:- BRC1, BRC2, ER7, ER12, HR12, HR1a, plus 4 additional locations as required by Condition 6.15

Boreholes HR12 and HR1a are located on lands outside the licensed boundary of the proposed site and not in the ownership of the Local Authority. While every effort will be made to continue the monitoring of these locations, their continued availability is outside the control of the Local Authority and therefore it is requested that these are removed from the license and the license read as follows;

Groundwater wells:- BRC1, BRC2, ER7, ER12 plus 4 additional locations as required by condition 6.15

#### SCHEDULE D

It is requested that the Agency consider amending the requirements of the first SEW from;

Development of the facility including preparatory works and lining and stability calculations

To;

- Development of the initial facility including details of the facility infrastructure and cell construction
- Development of all subsequent cell constructions
- Development of all significant infrastructural developments

It is requested that the Agency do not include the requirement to provide stability calculations at the SEW stage since these can be dependent on specific materials used in the construction of the cells which will not be definitively selected at the stage when the SEW is submitted to the Agency.

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