

F.A.O. Mr. Brian Meaney
EPA
Headquarters,
P.O. Box 3000,
Johnstown Castle Estate,
Co. Wexford
7th September 2011



Re: Notice in accordance with Article 14(2)(b)(ii) of the Waste Management
(licensing Regulations 2004, as amended.

Ref: Clean (Irl) Refuse & Recycling Ltd. Reg no. W0253-01

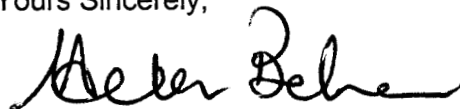
Dear Mr. Meaney,

Please find attached the responses to items (1) and (2) to the letter dated received from the Agency on 11th August 2011.

This information has had no impact on the content of the Technical Summary previously submitted and therefore has not been revised as part of this submission.

Please find enclosed one original plus one copy in hardcopy format and two copies of the requested information in PRF format on CD-ROM.

Yours Sincerely,



Ms. Helen Behan
Environmental Consultant
045 439376

On Behalf of Clean (Irl) Refuse & Recycling Ltd.
Reg no. W0253-01 (in application)

Bord na Mona Environmental
Trading as
Anua Environmental
Main Street,
Newbridge,
Co. Kildare.

Bord na Móna Environmental Ltd T/A Anua
Registered Office: Main Street, Newbridge, Co Kildare, Ireland. Registered No: 303313, VAT No: IE6323313B
Directors: R. Scanlan (Chairman), P. Bennett, P. Fox, C. Ó'Gógáin

Attachment 1

Query (1) : Type of Waste Activity

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A.1 Type of Waste Activity, Tonnages & Fees

A.1.1 Specify the class or classes of activity in Table B.7.1, in accordance with the Third Schedule or Fourth Schedule to the Waste Management Acts 1996 to 2010, as amended by the European Communities (Waste Directive) Regulations, 2011, to which the application relates (check the relevant box(es) and mark the principal activity with a ‘P’).

Attachment B.7 should identify the principle activity and include a brief technical description of each of the other activities specified. **There can only be one principal activity.**

TABLE B.7.1 THIRD AND FOURTH SCHEDULES OF THE WASTE MANAGEMENT ACTS 1996 TO 2010

Waste Management Acts 1996 to 2010					
Third Schedule Waste Disposal Operations		Y/N	Fourth Schedule Waste Recovery Operations		Y/N
D 1	Deposit into or on to land (e.g. including landfill, etc.).	N	R 1	Use principally as a fuel or other means to generate energy: This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above: <ul style="list-style-type: none"> - 0.60 for installations in operation and permitted in accordance with applicable Community acts before 1 January 2009, - 0.65 for installations permitted after 31 December 2008, using the following formula, applied in accordance with the reference document on Best Available Techniques for Waste Incineration: Energy efficiency = $(E_p - (E_f + E_i)) / (0.97 \times (E_w + E_f))$ where— <ul style="list-style-type: none"> ‘E_p’ means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1 (GJ/year), ‘E_f’ means annual energy input to the system from fuels contributing to the production of steam (GJ/year), ‘E_w’ means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year), ‘E_i’ means annual energy imported excluding E_w and B_f (GJ/year), ‘0.97’ is a factor accounting for energy losses due to bottom ash and radiation. 	N
D 2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.).	N	R 2	Solvent reclamation/regeneration.	N
D 3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).	N	R 3	Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and	P

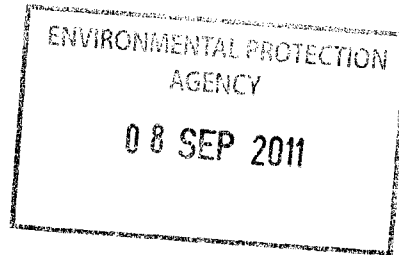


WASTE Application Form

				pyrolysis using the components as chemicals.	
D 4	Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).	N	R 4	Recycling/reclamation of metals and metal compounds.	Y
D 5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.).	N	R 5	Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.	Y
D 6	Release into a water body except seas/oceans.	N	R 6	Regeneration of acids or bases.	N
D 7	Release to seas/oceans including sea-bed insertion.	N	R 7	Recovery of components used for pollution abatement.	N
D 8	Biological treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12.	N	R 8	Recovery of components from catalysts.	N
D 9	Physico-chemical treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.).	N	R 9	Oil re-refining or other reuses of oil.	N
D 10	Incineration on land.	N	R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	N
D 11	Incineration at sea (this operation is prohibited by EU legislation and international conventions).	N	R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	Y
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).	N	R 12	Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11).	Y
D 13	Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12).	N	R 13	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).	Y
D 14	Repackaging prior to submission to any of the operations numbered D 1 to D 13.	Y			
D 15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	Y			

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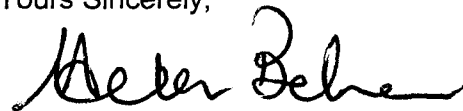
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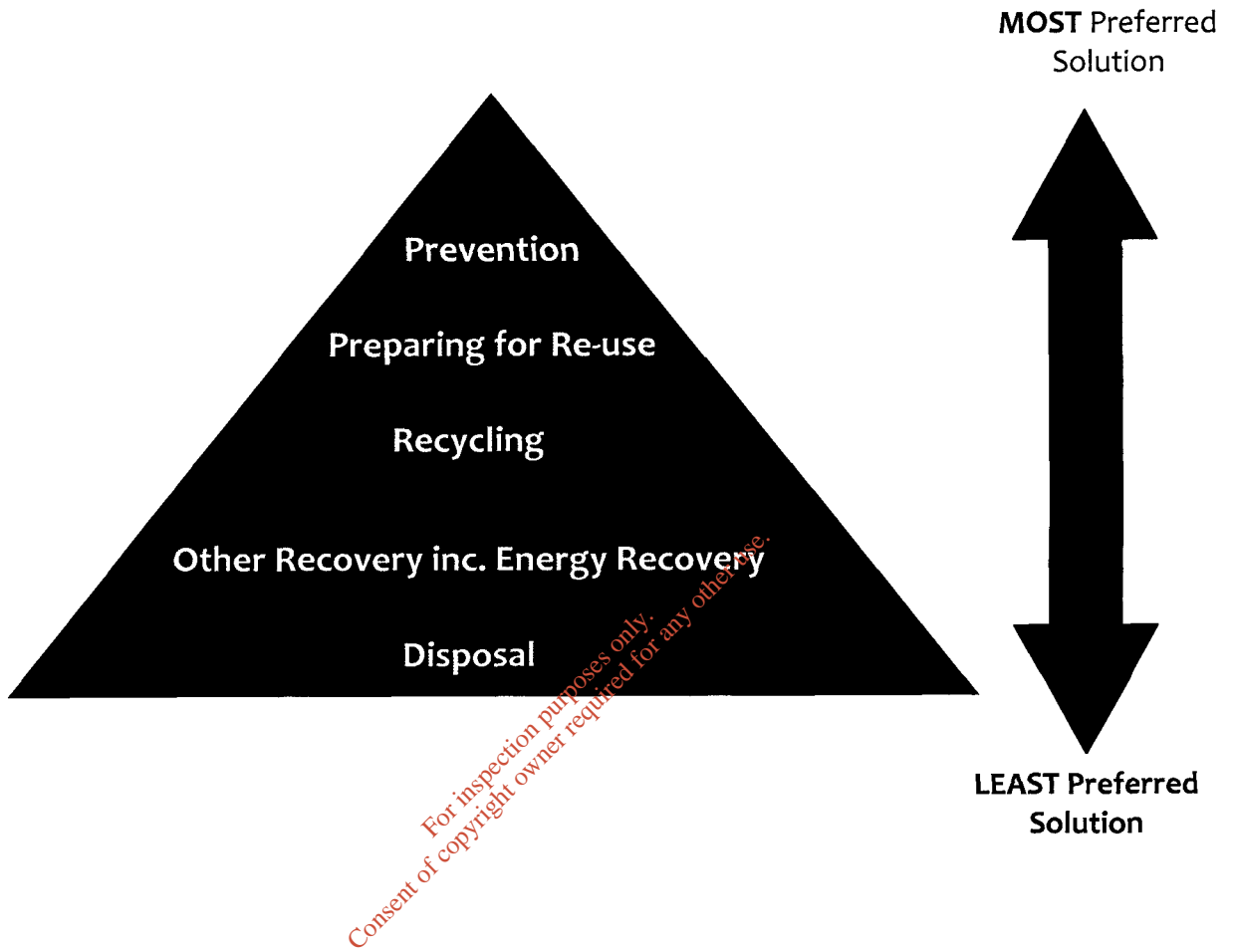
Attachment 2

Query (2) :Waste Hierarchy

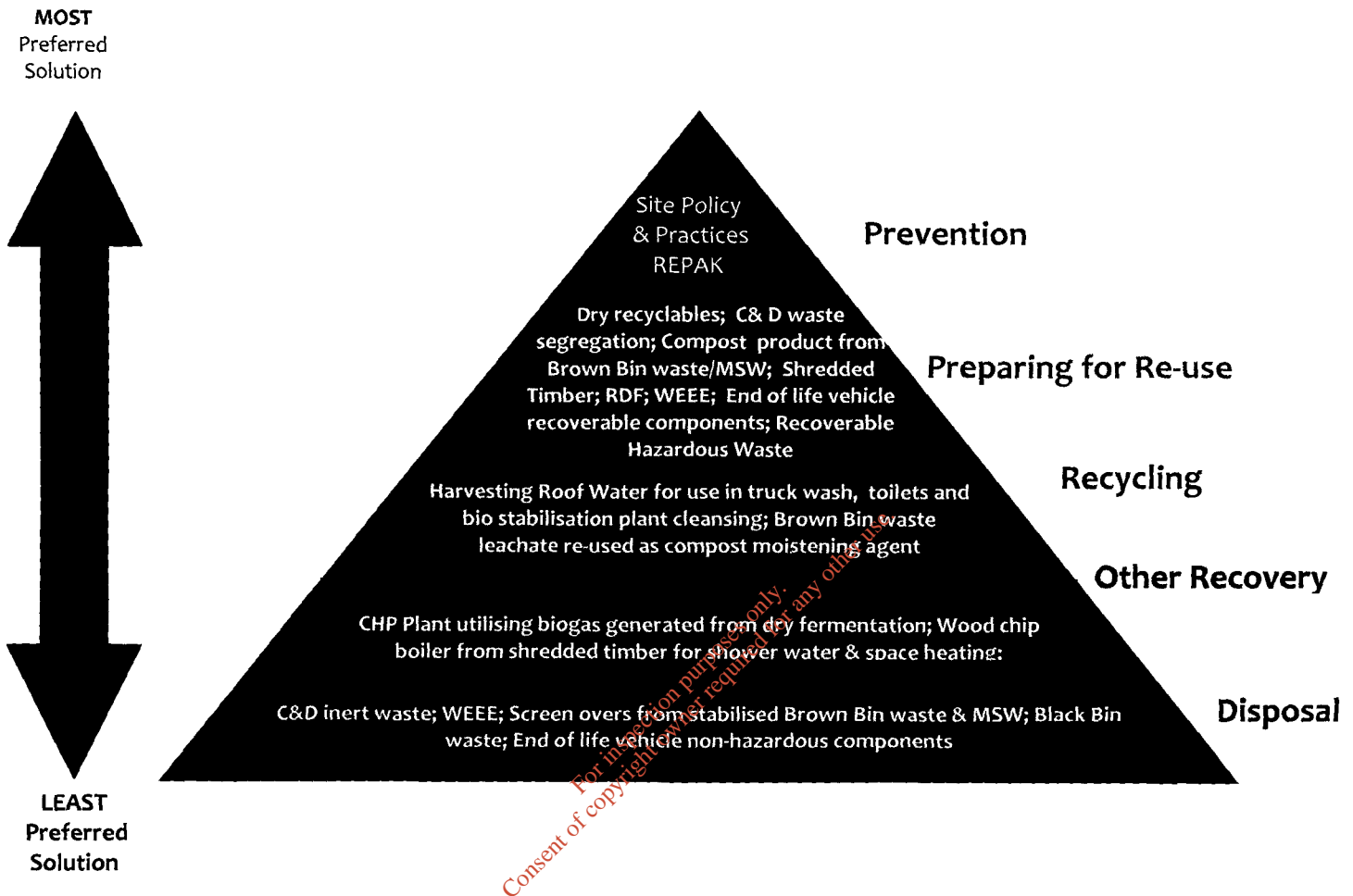
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Waste Hierarchy

Section 21A (insertion) Subsection (1)
of Waste Management Act 1996



Clean (Irl) Refuse & Recycling Ltd. Waste Hierarchy



Prevention

Practice at the site for the prevention of waste generation involve initiatives to minimise waste generation. These include:

- Compacting bales to use less baling wire
- Training of staff on best practices of waste prevention
- Reduce the use of water and energy resources in order to prevent waste generation
- Encouraging computer back-up of data and not paper based files when possible
- Two sided printers for printing internal documents
- Refilling of cartridges for use in printer and photocopiers
- Use on e-mail instead of faxed or printed copies.
- non disposable tableware in canteens
- Future initiatives to replace paper invoicing with electronic and SMS text billing
- Use of Waste Prevention Audits: Clean Ireland Recycling engages with several customers that they currently collect from which involves site assessments to recommend methods for preventing waste generated
- REPAK awards for recycling of packaging in industry

Preparing for Re-use

- This practice for preparing waste for re-use is the principle activity at the facility where dry recyclables processing involves segregating, baling and packaging of plastic, cardboard, paper and glass for transport off site to waste brokers
- Construction & Demolition Waste is segregated and components packaged for transport off site to waste brokers
- Compost product generated from the biostabilisation plant (Brown Bin & Mechanically Sorted Waste Brown Bin fines) is intended for re-use for domestic and commercial customers over application as landfill cover
- Timber shredded in bulk and transferred out of the facility for re-use as animal bedding
- Refuse Derived fuel 3,000 tpa (from MSW) is packaged for re-use as a fuel source
- End of life vehicle recoverable components are segregated and packaged for transfer out of the facility for future re-use or disposal
- Hazardous Waste that can/cannot be further processed are packaged for transfer out of the facility for future re-use/disposal at the end destination
- WEEE: white goods are packaged for depollution/re-use/disposal at end destination

Recycling

- No waste received to site is recycled on site, it is not the function of the facility
- 90 m³ of roof water is harvested and stored on site for truck/wheel washing activities and also water supply for toilet flushing
- Leachate collected from floor washing in the brown bin waste segregated area in the Biostabilisation plant is recycled by using the leachate as a moistening agent in the composting process

Other Recovery

- Combined Heat Power Plant utilising 1,720,000 m³ biogas generated from dry fermentation giving 526KWel of electricity for supply to the facility and potential export from the site to the National Grid
- 558 kW of recoverable thermal output (180 degrees C) is generated by the CHP plant. Of this thermal energy generated, the Biostabilisation process only needs small amounts (5%) for in-floor heating of dry fermentation chambers and heating of biostabilisation building; the surplus may be used for external thermal use
- 26 KW wood chip boiler fuelled by woodchip from timber shredding process is used at the facility for heating showers and other heating requirements

Disposal

- Given the infrastructure at the facility, the maximum volume of waste is processed adhering with landfill diversion policy
- 8,000 tpa of MSW black bin waste will be marked for landfill with facility is at full capacity
- 1,500 tpa of stabilised biowaste from Brown Bin waste processing in Biostabilisation plant will be sent to landfill
- 3,500 tpa of stabilised biowaste from MSW processing in Biostabilisation plant
- C&D waste that cannot be recycled and is non hazardous will be sent to landfill
- End of Life Vehicle waste that cannot be recycled & is non-hazardous will be sent to landfill
- Interceptor sludge from two surface water discharge points at the site is disposed of a wastewater treatment plant by waste contractor
- Leachate on site arising from wheel washing, truck washing and biostabilisation plant washings is tankered off site and is disposed of a wastewater treatment plant by waste contractor
- Success of RDF will divert 3,000 tpa from landfill