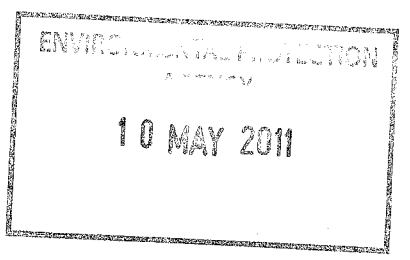
20 YEARS
FEHILY TIMONEY & COMPANY
CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES
CORK DUBLIN

Mr. Brian Meaney,
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency Headquarters,
PO Box 3000,
Johnstown Castle Estate,
Co. Wexford.



9th May 2011

Dear Mr Meaney,

Our client WGE Projects ltd., proposes to establish gasification of the by-products of mechanical waste treatment at Country Clean Recycling Ltd. Churchfield Industrial Estate, John F. Connolly Rd, County Cork The facility is currently permitted by Cork County Council and an application for a waste licence has been submitted (W0257-01).

The proposed feedstock, while unsuitable as recyclable material nonetheless has high calorific value and will be suitable for recovery by gasification combined with utilisation of heat (and electricity). Thus, in the context of its use for gasification and energy production, it can be considered to be solid recovered fuel (SRF)

Notwithstanding the fact that the gasifier will be within a waste facility, we contend that by designating the feedstock as a fuel for the purpose of generating heat and electricity, we are effectively moving into the 'end of waste' realm. End of waste is a concept discussed and defined in Directive 2008/98/EC OF the European Parliament and of the Council of 19 November 2008 on Waste.

End of waste status can be assigned when it has undergone recovery, including recycling, operation and complies with specific criteria to be developed in accordance with the following conditions:

(a) the substance or object is commonly used for specific purposes;

It is suggested that the processed material can be used as a solid recovered fuel in lieu of fossil fuel used currently to generate electricity at the facility

(b) a market or demand exists for such a substance or object;

There is a continuing and increasing demand for fuel and energy, particularly non-fossil fuels

(c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products;

The calorific value of the processed material is approximately 12 - 14 MJ/kg making it suitable and sufficient for use as SRF in the context of gasification

(d) the use of the substance or object will not lead to overall adverse environmental or human health impacts. The criteria shall include limit values for pollutants where necessary and shall take into account any possible adverse environmental effects of the substance or object.

The technique of gasification is a thermal process that gasifies material in a safe manner that does not give rise to significant pollutants. Typical emissions are as follows;

EMISSION PARAMETERS	UNITS	TEST RESULTS
Total Particulate	mg/m^3	0.114
Hydrogen Chloride	g/hr	168
Dioxin/Furans	ng/kg waste	2.26×10^3
Total Methane	Mg/m^3	1.35
Total Gaseous Non-Methane Organics	ppm	1.50
Rule 1150.1 Organics		
Acetonirile	ug/m^3	ND
Benzene	ug/m^3	2.97
Benzylchloride	ug/m^3	ND
Chlorobenzene	ug/m^3	ND
Dichlorobenzenes	ug/m^3	ND
1,1-dichloroethane	ug/m^3	ND
1,2-dichloroethane	ug/m^3	ND
1,1-dichloroethylene	ug/m^3	ND
Dichloromethane	ug/m^3	52.8
Perchloroethene	ug/m^3	ND
Carbon Tetrachloride	ug/m^3	0.48
Toluene	ug/m^3	20.24
1,1,1-trichloroethane	ug/m^3	1.09
Trichloroethane	ug/m^3	ND
Chloroform	ug/m^3	1.61
Vinyl Chloride	ug/m^3	ND
m+p-xylenes	ug/m^3	4.73
o-xylene	ug/m^3	3.47
Nitrogen oxides	ppm @3% O_2	151.3
Carbon monoxide	Mg/m^3	8.25
Carbon dioxide	percent	2.1
Oxygen	percent	17.8

The proposal is to initially establish a plant capable of processing 0.5 tonnes per hour (TPH) that, depending on duty hours would equate to approximately 4,000 tonnes per annum (TPA). The resulting heat will be converted to electrical energy through a CHP Plant with excess heat proposed to dry wood-chip. WGE is also investigating the use of excess heat in nearby industrial/commercial premises.

In the light of implementation of Landfill Directive targets through recent licence reviews and accelerated by the announcement of significant landfill levy increases, our client hopes to progress with this project promptly. This proposal is seen as a viable contributor to landfill diversion.

I would appreciate it if you could forward the emissions standards required for gasification or any other standards set out for this thermal process.

Our client proposes to install the unit within the next three months on a trial basis during which emissions testing will be undertaken. Test results will be made available to the Agency.

Yours sincerely,

Declan O'Sullivan

For and on behalf of **Fehily Timoney & Company**