

REPORT

25th October, 2010

FAO: Mr. Joe Noonan,
C/o. Noonan Linehan Carroll Coffey, Tel/Fx: 021 427 0518/4347, jnoonan@nlcc.ie
54 North Main Street,
Cork.

OUR REF: rta-25.10.10-nlcc-rky-4.09
YOUR REF: (Proposed Incinerator)

RE: Discussion of Additional Considerations Arising from the EIS Addendum

1 Introduction

This report presents a review of Indaver's 2010 Addendum to the EIS in respect of the author's concerns outside of coastal erosion, hydrogeology & flooding and supplements the author's earlier reports of 30/4/09, 5/5/09 and 13/5/09.

2 Additional Issues Arising

Additional Issues arising in the EIS addendum are discussed in the following sections.

2.1 Over-Estimation

§3.4.3.2, Pg. 39 Bullet 3 states that there has been an over-estimation of the emissions from the site and the impact of the proposed facility on human health and the surrounding environment. This raises two issues. Firstly the model is meaningless because its inherent inaccuracy has been stated. Secondly the statement that the mathematically modelled emissions are estimated is confusing.

2.2 GHG Emissions Related to Road Upgrade & Rock Revetments

The construction of the rock revetments will involve the movement of 7,200m³ of rock at a stated 24 loads per day for 6 weeks (§3.9.4.1 Soil & Geology). This is equivalent to 720 no trips at 25 litres of diesel per trip conservatively based on 50km round trips for locally-derived rock. This is equivalent to 18m³ of diesel at 2.4km/litre plus that involved in the emplacement. Similarly with the road construction 6,250 m³ of fill would result in the

consumption of 15m³ diesel for transportation plus works. A conservative assumption would suggest a total additional consumption of ca. 40m³ of diesel for these corrective works.

2.3 GHG Emissions Related to Operation Truck Movements

It is stated in §3.5.3.3 that no detailed assessment has been carried out on the level of GHGs from the transport of waste and a USEPA report is cited. However a rough estimate of diesel fuel consumed is made using the EIA Addendum report data as follows:

211 HGV trips/day are proposed for the non-municipal operational phase for the facility (pg. 73). Based on 500km round trips at 2.4km/litre, this would suggest a daily consumption of 4.4m³ or 1,373m³ per annum. This exceeds the 200m³ of light fuel oil it is proposed to burn annually in the NET generation of 10MW of electricity by a multiple of 6.9. Other site operational fossil fuel uses would relate to fork lift, employee travel journeys and site based internal combustion-engined machinery. It is evident from this rough estimate that in a holistic approach to Kyoto Target evaluation, GHG and carbon emissions from these sources need to be included.

2.4 GHG Emissions Related to Construction Phase

Some idea of the fossil fuel requirements during the construction phase can be obtained from a study of Table 3.6.3. The same conclusion applies as made in the previous section.

2.5 Electrical Generation & Transmission

It is stated that the NET electrical generation will be 10 Megawatts in the plants reduced form. §3.13.5 states that the electricity will be exported to the National Grid via 38kV lines for which planning permission will be required.

38kV lines are sub-transmission lines and have relatively high transmission losses compared to the 6.4% average reported for 110 kV lines. Any estimate of transmissive efficiency will depend on a number of additional factors including weather but 12.2% losses (UK Average for low voltage transmission) can be expected. Application of this loss would appear to reduce the available electrical power received by the grid at the distributing point to 8.78 Megawatts.

2.6 Cumulative Comparisons

Using the 200m³ of light fuel oil consumed annually by the plant and an assumed modest figure of 1,500 m³ used by HGVs, plant equipment, and employee travel, a cumulative total fossil fuel consumption of 1,700 m³ per annum is arrived at. An allowance for fossil fuel during consumption and materials/equipment/machinery manufacture spread over thirty years operation should be included. This total annual consumption may then be compared

against the NET annual power generated and the GHG savings gained by incineration rather than conventional disposal.

2.7 PORTA Review 2009

A careful examination of the text extract from the Review by Daniela Porta et al. does nothing to dispel concerns of a potential for an increased risk in cancer arising from incinerators. The fact that the report focused on old incinerators along with Arup's comment on pg. 29 do not provide reassurance.

2.8 The GIUSTI Review 2009

The text extract from the Giusti Faculty report on pg. 29 clearly states that the evidence of adverse health outcomes for the general population living near landfill sites, incinerators, and nuclear installations is usually insufficient and inconclusive. However the statement made by Arup that follows cannot be derived from the extract and would appear to be misleading.

This completes this supplementary report.

Authored by Mr. Shane Bennet on behalf of S.M. Bennet & Co. Ltd. End of Document