

STRATEGIC INFRASTRUCTURE DEVELOPMENT  
APPLICATION TO AN BORD PLEANÁLA  
(REG NO. PL04.PA0045)

ORAL HEARING

RINGASKIDDY RESOURCE RECOVERY CENTRE, COUNTY CORK

WITNESS STATEMENT OF MR. NIAL HARTÉ

TRAFFIC & TRANSPORTATION

## 1. Qualifications and Experience

My name is Niall Harte. I am a Chartered Civil Engineer. I am an Associate with Arup and lead the transportation division in Arup's Regional Office in Cork. I have 9 years' experience in the production of Traffic Impact and Transport Assessments for various types of developments including major industrial and infrastructural projects. I have an Honours Degree in Civil and Environmental Engineering from University College Cork (graduated in 2001) and I am a chartered member of Engineers Ireland.

I have acted as the Transportation Lead in Arup's Cork office for 5 years, other work that we are involved in includes Mobility Management Plans, School Travel Plans, Road Safety Audits, Road and Junction Design, Transport Planning and Traffic Modelling.

## 2. Role in the Project

### Introduction

Indaver Ireland commissioned Arup to carry out a Traffic Impact Assessment of their proposed Ringaskiddy Resource Recovery Centre to form a Roads and Traffic Chapter in the EIS (Section 7).

In preparing this witness statement, I have considered each of the observations submitted to An Bord Pleanála by various parties in relation to the Transportation impact appraisal of the Ringaskiddy Resource Recovery Centre. I have addressed each of them by Topic below.

## 3. Submissions and Responses

### Issue #1: Proper Evaluation of Cumulative Impact of the proposed Port of Cork and other Traffic Generation

Submission: from An Taisce; Others;

It is submitted that the proposal does account for the cumulative impact with the Port of Cork Traffic and other traffic and it is questioned whether the *'road traffic generated by the proposed development has been fully and correctly evaluated, specifically given the prospective and significant increment anticipated on foot of the recent Grant for the development of existing port facilities at Ringaskiddy'*

### Response:

Section 7.5.3 of the EIS demonstrates how a 'Medium Growth Rate' scenario has been assumed for the Ringaskiddy area for the coming years, which will consider all committed and likely future development in the area, with the exception of the Port of Cork Development. This is in accordance with the 'NRA Project Appraisal Guidelines, Unit 5.5 – Link-Based Traffic Growth Forecasting'. As the Port of Cork Development is of Strategic Significance, the traffic generation quantities for Phases 1 and 2 presented in the EIS for the Port of Cork Development, have been included separately as part of the Indaver EIS, as per Section 7.6.4 of the Indaver EIS. As Phases 1 and 2 of the Port of Cork Development are assumed to be completed by 2018, the future year base traffic volumes presented in the 'Without' columns in Tables 7.16 – 7.21, represent the 2014 traffic survey volumes from

Table 7.3, but now include the medium growth rate increases in background traffic, as well as the proposed Port of Cork traffic generation.

The traffic generation details presented in Section 7.7 of the EIS for both the construction period and the operational phase of the proposed development, have been derived from experience during the construction of Indaver's resource recovery centre in Co. Meath.

The above is corroborated by Cork County Council's Senior Engineer for Traffic and Transportation, who states in his Planning Report that:

*'Traffic impacts of the proposal have been adequately analysed.'*

#### Issue #2: Changes since Indaver's previous application

Submission: from the Hudsons and the Mulcahys

The following is queried: *'What factors have materially changed since Indaver's previous and unsuccessful application for a similar development?'*

Response:

From a Traffic Impact point of view, the following changes are noteworthy, as per Section 7.7 of the Traffic Chapter:

- Indaver have committed to a longer 14-hour opening period for waste acceptance between 06:00 – 20:00 in order to mitigate the traffic impact. The current development proposes to ban all construction-related traffic and staff arrivals and departures between the two-hour local traffic peak periods of 07:00 – 09:00 and 16:00 – 18:00. The previous application proposed 134 construction-related vehicles between 07:00 – 08:00, 34 construction-related vehicles between 08:00 – 09:00, 34 construction-related vehicles between 16:00 – 17:00 and 75 construction-related vehicles between 08:00 – 09:00.
- The current development proposes only 6 operational vehicles between 07:00 – 08:00, 8 operational vehicles between 08:00 – 09:00, 8 operational vehicles between 16:00 – 17:00 and 8 operational vehicles between 17:00 – 18:00. The previous application proposed 6 operation vehicles between 07:00 – 08:00 and 39 operation vehicles between 08:00 – 09:00, 22 operational vehicles between 16:00 – 17:00 and 18 operational vehicles between 17:00 – 18:00.
- Indaver have committed to implementing a Staff Mobility Management Plan as per Section 7.11.1 of the Traffic Chapter.
- Indaver have committed to implementing a HGV Mobility Management Plan as per Section 7.11.3 of the Traffic Chapter.

The above mitigation measures have resulted from consultation with the Transportation Department of Cork County Council, who pointed out that current traffic patterns in Ringaskiddy have resulted in a phenomenon called 'peak spreading', whereby some commuters will avoid the main AM and PM peak hour. This avoidance of the peak hour is not necessarily a result of large increases in traffic volumes in Ringaskiddy in recent years. When we compare the 2008 traffic surveys, which were used for the previous planning

application, with the 2014 traffic surveys, traffic volumes appear to have reduced at the Shannonpark Roundabout, between 2008 and 2014, with the only increase (2%) being recorded at on the eastern arm of the Shannonpark Roundabout during the PM peak hour. Nevertheless, Cork County Council have recommended that the local peak traffic periods are accepted to be two-hour periods between 07:00-09:00 and 16:00-18:00, which Indaver have accepted.

Issue #3: Application premature prior to upgrading of the road network due to current congestion

Submission: from Saleen & District Residents' Association; CHARD; Scoil Barra Naofa; Cork Environmental Alliance; Mamie Bowen (CHASE); Scoil Náisiúnta Seanbhaile; Mary O'Leary (CHASE); Ringaskiddy and District Residents Association; Simon Coveney TD; Cllr Marcia D'Alton; Donnchadh Ó Laoghaire TD; Michael McGrath TD; David Stanton TD; Safety concerns over current congestion experienced on the local road network have been raised and it has been queried '*whether it is premature and/or appropriate for the application to be considered prior to upgrading of the road network serving the facility*' and '*does it represent sustainable and proper planning given ongoing inadequacies of the road network (N40, Dunkettle)*'?

Response:

While the proposed M28 upgrade of the local road network in Ringaskiddy and the Dunkettle Interchange upgrade works are both included in the Government Capital Investment Programme, Chapter 7 of the EIS has been prepared with the assumption that neither will be upgraded and demonstrates that, with the mitigation measures prescribed in Section 7.11, the proposed centre can be accommodated on the existing local road network and the N40, without upgrading. This is illustrated in Tables 7.20 and 7.21 which show the percentage increases in traffic flows for the local network AM peak hour of 07:30-08:30 and the local network PM peak hour of 16:30-17:30. The percentage increase in traffic flow is minimal at between zero and 1% on most link roads, with the greatest increase shown to be between 5% and 6% on the eastern side of the Ferry Port Access junction, due to the small volumes of background traffic experienced at this location.

Traffic counter information on the N40 indicates that upwards of 60,000 vehicles per day travel of the N40. Table 7.11 of the EIS shows that it is projected that 80% of HGV waste deliveries will originate from and return to the N28 north of the Shannonpark Roundabout. While this percentage is expected to reduce even further before reaching the N40, if we were to assume that the total volume of daily operational traffic (306 vehicles as per Table 7.9 of the EIS) would reach the N40, this would represent an increase of only 0.5% in daily traffic on the N40 and the Jack Lynch Tunnel.

Issue #4: Proposed HGV traffic generation

Submission: from Senior Executive Engineer – Carrigaline Local Area Office

Clarification is sought of the apparent discrepancy in relation to HGV figures as per Section 7.7.1 and Table 7.7.13 of the EIS '

(It should be noted that the reference in the query to Section 7.7.1 is incorrect, and that this should read 7.7.11)

Response:

This is not a discrepancy. Section 7.7.11 outlines that 71 no. HGV arrivals are expected to the proposed development during a 14 hour day, equating to 142 no. round trips per day. However, Section 7.7.11 continues to explain that due to past experience at other facilities, Dublin Port Waste Transfer Station, for example, it was established that the peak usage of the facility was 13% greater than the average usage. The traffic generated through HGV movements (71) has been increased by 13% to account for the peaks in the arrival of vehicles, resulting in an increase to 80 vehicles (i.e. 160 two-way HGV movements) per day.

While the assessment assesses the impact of 80 no. HGV arrivals per day as per Table 7.9, this is a worst case, and the lower figure of 71 no. HGV arrivals per day is more likely to constitute the average quantum of HGV arrivals per day over the course of a year.

*Issue #5: Proposed HGV traffic generation from Waste Removal*

Submission: from Lorna Bogue

Clarification is sought of the 'omission of a transparent breakdown' of waste arrival and waste removal details.

Response:

Section 7.7.11 of the EIS outlines that 142 HGV movements per day are proposed during the operational phase. This does include the removal of waste from the facility. The details of the calculation of HGV vehicles is presented below for Waste In and Waste Out:

<b>Waste In</b>	<b>Truck Qty</b>	
Haz	1,250	
Liquid	217	
Sludge	294	
Sludge	2,143	
Non Haz Solid	12,188	
Liquid	217	
<b>Waste Out</b>		
Ferro	600	
Non Ferro	60	
Bottom Ash	1,600	
Boiler Ash	100	
Flue Gas Ash	600	
<b>Raw Materials</b>		
Lime	144	
Ammonia	42	
Clay	7	
Others	19	
Fuel	15	
<b>TOTAL</b>	19,496	trucks per year
50 weeks per year	390	trucks per week
5.5 days per week	71	trucks per day

#### 4. CONDITIONS RECOMMENDED BY CORK COUNTY COUNCIL

The following condition has been recommended by Cork County Council, which has not been accounted for in the EIS:

##### 4.1

*'No HGV traffic shall be allowed to access the site via Carrigaline or the R613 during either during the construction or operational phases.'*

##### Response:

Only 3% of HGVs are projected to use the R613 during both the construction phase and the operational phase. This equates to only 9 HGVs (20 PCUs) per day during construction and only 5 HGVs (11 PCUs) per day during the operational phase. While these quantities are low, if these HGVs are to be prohibited from the R613, they will need to be accommodated on the N28, resulting in all traffic associated with the facility passing through Shanbally Village for example. Considering that the R613 currently accommodates HGV movement to and from Ringaskiddy, we believe that the R613 should be capable of accommodating the 3% of the construction and operation HGV traffic associated with the proposed development.

##### 4.2

In relation to HGV movement, the Local Area Engineer has *'asked that consideration be given in the mobility management plan to reducing the numbers planned to and from the facility'* between 13:00–15:00 to accommodate school collection times.

##### Response:

Indaver have already committed to restricting the operational traffic to 3 HGV arrivals and departures per hour between 07:00–09:00 and 16:00–18:00. There is no proposed reduction in HGV traffic on the N28 between 13:00-15:00 as the traffic volumes during this interpeak period are significantly lower than the AM peak period. Table 7.3 in Section 7.5.2 of the EIS demonstrates that the background traffic volumes experienced between 14:00-15:00 is as much as 65% lower than peak period volumes. We believe that a reduction in the proposed HGV traffic between 13:00-15:00 is not necessary, having regard to the available capacity on the network at this time and we believe that this is in line with the recent permission granted to the Port of Cork proposal.

## 5. Conclusion

The Mitigation Measures presented in Chapter 7 of the EIS acknowledge the current traffic patterns in the Ringaskiddy area, and accept Cork County Council's Transportation Department's advice that two-hour peak periods currently exist between 07:00-09:00 and 16:00-18:00. All construction traffic will be prohibited from travelling to and from the site during the aforementioned peak periods, while operational traffic will be restricted to a maximum of 3 HGV arrivals and departures per hour during these same peak periods.

As mentioned in the Planning Report of Cork County Council's Peter O'Donoghue (Senior Engineer for Traffic and Transportation), congestion is not a problem in the Ringaskiddy area outside of the peak traffic periods, and there is significant traffic capacity available, particularly on the N28 route. Indaver proposed to use these inter-peak periods to make use of this spare network capacity for the proposed operations.

I believe that the development as proposed can be accommodated by the local road network, in advance of the M28 Cork to Ringaskiddy Motorway scheme, as indicated in the results of the analysis in Chapter 7 of the EIS. This is corroborated by Cork County Council's Senior Engineer for Traffic and Transportation, who states in his Planning Report that:

*'The proposed development, when operated fully in accordance with the Demand Management measures put forward, will not adversely impact the road network in the area.'*