

Communications Register

<p>Friday 3rd November</p>	<ul style="list-style-type: none"> • Meeting with Meath County Council Officials • Meeting with IBEC • EPA & Dept of Environment informed of project & communication plan by letter
<p>Monday 6th November</p>	<ul style="list-style-type: none"> • Meeting with Meath Councillors • Display panel & literature in Ardboyne Hotel, Navan* <ul style="list-style-type: none"> • Press briefing 2 – 5pm to Local and National Media on 6th • 7 Councillors and 1 journalist visited the displays • Other media interviews given on the telephone • 500 copies of the enclosed information leaflet distributed by our staff to all houses in the local environs – to date over 40 people returned business reply card requesting further information • Information Pack delivered to all Meath T.D.s
<p>Tuesday 7th November</p>	<ul style="list-style-type: none"> ▪ Information Packs sent to Louth, Cavan and Monaghan County Council Officials ▪ Information Pack sent to Louth, Cavan and Monaghan TDs & Councillors ▪ Information Pack sent to other interested bodies in the region e.g. IFA, ICA, Chambers of Commerce and Political Parties
<p>Week beginning 13th November</p>	<ul style="list-style-type: none"> ▪ Information Leaflet distributed to 12,000 houses in the Drogheda area ▪ Local people were to contact us for more information – to date over 60 people returned business reply card requesting further information ▪ Letter to immediate neighbours with invitation to attend public meeting in

Communications Register

	<p>Boyne Valley Hotel, Drogheda. Attendance: 65 people - neighbours and other interested parties.</p> <ul style="list-style-type: none"> ▪ Communications Register advised of Open day & adverts
Week beginning 20 th November	<ul style="list-style-type: none"> • All Meath Councillors and local media invited to Indaver Belgium – trip included visit to material recycling facility, compost facility and grate incinerator similar to that proposed for Carranstown. Group included six local Councillors and two local journalists – two other local journalists joined the group for the incinerator part of the visit. • Public information days held in Duleek on 23rd & 24th November. Attendance: 30 people in total • EPA, Dept of Environment, MCOS updated on communications programme to date • Communications Register advised of public meeting
Week beginning 27 th November	<ul style="list-style-type: none"> • Public information days in Drogheda on the 29th & 30th of November. Attendance: 20 people in total • Public meeting in Drogheda. Attendance: 70 people – neighbours, local people from Drogheda and local politicians
Week beginning 4 th December	<ul style="list-style-type: none"> • Presentation to parents of children in local school on 5th December at request of the Board of Management. Attendance 60 parents. • Public information days in Navan on the 6th & 7th of December. Attendance: 9 people in total.
Week beginning 11 th	<ul style="list-style-type: none"> • All immediate neighbours invited to Indaver Belgium – trip includes visit

Communications Register

December	to the grate incinerator, Beveren, similar to that proposed for Carranstown. Group included seven neighbours.
Week beginning 1 st January 2001	<ul style="list-style-type: none"> • A number of immediate neighbours and the Boyne Valley Trust invited to Indaver Belgium – trip includes visit to the grate incinerator, Beveren, similar to that proposed for Carranstown. Group included five neighbours and three people from the Boyne Valley Trust. Met with Flemish Waste Management Authority and Civil Servant involved with Waste Management in Beveren.
Week Beginning 15 th January 2001	<ul style="list-style-type: none"> • Planning Application lodged with Meath County Council
Week Beginning 22 nd January 2001	<ul style="list-style-type: none"> • Copy of Non Technical Summary of EIS sent to all on Communications Register and anyone else enquiring for copy. Non Technical Summary and Planning Specification put on Website. Advert placed in local papers. Copy of advert sent to Communications Register. Plant model, safety features panel and literature put on display in Meath Co Co Office, Duleek.
Week Beginning 5 th February 2001	<ul style="list-style-type: none"> • Communications Register advised of further information provided on website and availability of Indaver Belgium Website in English

Communications Register

<p>Week Beginning 19th February 2001</p>	<ul style="list-style-type: none"> • LMFM, panel of 10, RTE Farm News and Ear to the Ground (RTE One) were taken on a trip to Belgium to visit a Material recycling facility, compost facility and grate incinerator similar to that proposed for Carranstown. Group included Louth & Meath Councillors, local residents, opposition group and waste collector. LMFM broadcast 'Loosetalk' live from Beveren site
<p>Week beginning 26th Feb 2001</p>	<ul style="list-style-type: none"> • Letter with copy of Safety Features & Non-technical Summary sent to all Louth, Cavan and Monaghan Council Officials. • Letter with WHO Publication on Waste Incineration sent to Louth & Meath Councillors. Please find a copy of the publication attached. • Letter with Composting at home – a beginners guide and Household waste management guide sent to all Communications Register. Please find enclosed a copy of each guide.
<p>Week beginning 12th March 2001</p>	<ul style="list-style-type: none"> • Anne Casey (Journalist with the Meath-Chronicle) brought to visit an Indaver Compost Facility, Material Recycling Facility and to view an Incinerator located in the densely populated area of Gwent. • Meath Co Co requested additional information on the EIS.
<p>Week Beginning 3rd April 2001</p>	<ul style="list-style-type: none"> • Communications Register & neighbours invited to put their name forward for possible inclusion on a Community Liaison Committee • Meath & Louth Councillors invited to put their name forward for possible inclusion on a Community Liaison Committee • EIS Consultees provided with update on project

Communications Register

<i>Week Beginning 16th April 2001</i>	<ul style="list-style-type: none">• Advertisement of Community Liaison Committee placed in local media
<i>Week Beginning 14th May 2001</i>	<ul style="list-style-type: none">• Advertisement promoting free availability of WHO guide placed in local media
<i>Currently</i>	Working on additional information requested by Meath County Council

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT H

WIND SPEED AND DIRECTION DATA

*For inspection purposes only.
Consent of copyright owner required for any other use.*

JUL 2000

Wind Speed (knots) and Wind Direction (degrees from North)
 (Wind measurements are sixty minute mean values)

DUBLIN AIRPORT

Grid reference :

0149

Height : 71m

DAY	HOUR (UTC)																								mean speed	max 10 min wind	hour max gust (time)	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	6	5	4	5	6	7	7	5	8	9	9	8	7	10	7	5	7	9	8	7	6	5	4	3	6.4	10	15	15(1411)
2	60	80	70	40	50	40	60	60	50	70	80	90	90	W/A	80	60	50	60	50	90	90	90	90	110	130	130		
3	3	3	1	2	2	3	2	3	4	7	8	8	9	8	8	9	10	10	7	5	5	8	8	6	5.7	11	17	14(1219)
4	110	120	110	110	50	90	120	40	10	30	110	110	100	140	130	90	80	100	90	100	80	80	80	90	90	90	100	
5	5	2	6	6	5	3	2	3	4	5	6	7	9	10	9	9	10	10	9	8	6	5	4	5	6.1	12	19	16(1751)
6	110	40	70	70	70	110	80	100	90	50	100	90	80	80	90	80	70	50	50	60	70	50	20	20	50	50		
7	5	6	6	7	8	9	9	10	11	11	12	12	10	10	9	7	7	7	6	6	4	4	3	3	7.6	14	12	18(1058)
8	360	10	20	10	30	40	50	50	50	50	40	30	60	60	60	60	60	60	50	50	360	350	340	270	30	40		
9	4	4	4	2	2	3	4	3	3	3	3	6	7	5	6	6	7	5	4	1	2	2	1	1	3.7	8	17	13(1231)
10	340	340	310	320	260	260	300	300	350	310	100	70	80	60	110	100	100	110	140	150	170	290	330	320	100	80		
11	3	4	5	4	5	6	7	7	8	7	6	5	5	6	10	11	12	13	12	10	8	5	5	7	7.0	14	16	19(1727)
12	320	280	290	290	300	300	310	310	330	340	340	340	20	60	70	50	40	40	40	30	20	10	10	340	30	20		
13	8	8	7	9	7	7	7	9	8	7	7	10	12	11	10	12	12	13	13	10	9	10	10	12	9.5	15	19	24(1754)
14	340	340	340	340	330	350	340	360	340	340	320	300	300	290	290	290	270	280	280	280	280	280	270	270	280	270		
15	11	11	11	11	11	12	11	14	13	15	17	15	15	14	14	15	16	16	18	16	14	15	16	16	14.0	20	19	30(1847)
16	270	270	270	270	270	270	270	270	270	270	260	250	250	240	230	230	230	230	230	240	240	250	260	260	240	230		
17	16	15	14	14	12	12	11	9	10	11	13	13	15	15	14	14	16	14	13	14	11	12	14	14	13.1	19	14	29(1644)
18	260	260	250	260	260	250	250	260	270	270	270	280	280	280	280	280	280	280	310	290	280	300	300	300	280	280		
19	17	15	15	15	16	14	16	13	19	17	20	19	20	18	20	19	17	19	17	17	13	12	8	7	16.2	24	15	36(1011)
20	310	300	300	300	300	300	310	320	330	320	310	330	320	330	340	330	320	320	320	330	310	310	300	290	330	330		
21	9	11	8	12	11	10	15	16	13	15	16	14	14	13	11	11	10	12	9	4	4	5	5	11.0	19	11	31(759)	
22	300	300	290	290	290	300	310	330	340	320	320	310	310	330	310	300	290	290	290	290	290	290	280	280	330	330		
23	4	4	4	5	4	6	7	9	9	10	10	8	9	12	13	12	10	11	10	8	10	10	8	8.3	16	14	21(1500)	
24	240	230	260	240	250	230	230	230	240	250	250	260	270	280	270	280	280	280	270	270	260	250	240	220	280	280		
25	7	11	12	13	14	13	12	15	17	16	13	16	16	16	14	17	17	20	18	16	14	12	14	14	14.5	22	18	29(1758)
26	220	270	270	270	270	280	280	280	270	270	270	260	270	270	270	260	270	260	270	270	270	280	280	280	260	270		
27	11	12	11	11	11	12	11	11	13	16	15	15	14	14	14	13	10	8	9	8	7	4	7	10.9	18	11	17(1025)	
28	270	280	290	290	280	280	290	280	290	290	280	290	300	290	290	290	300	290	290	300	280	290	290	300	290	290		
29	6	7	7	6	7	7	7	10	10	10	9	8	8	8	8	8	9	7	5	6	4	2	3	4	7.0	12	8	17(1550)
30	310	310	310	290	290	290	310	330	350	310	310	320	310	310	300	310	310	340	340	30	10	360	360	340	330	310		
31	3	3	5	6	5	6	6	5	2	2	3	3	4	6	6	7	8	7	7	6	4	3	2	1	4.6	10	17	15(731)
32	320	310	300	290	290	280	300	300	350	300	280	50	60	90	100	110	120	130	140	140	150	140	140	150	120	120		

JUL 2000

Wind Speed (knots) and Wind Direction (degrees from North)

DUBLIN AIRPORT

Grid reference :

O169

Height : 71m

HOUR (UTC)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	mean speed	max 10 mn wind	hour gust (time)	max gust (time)
17	4	3	2	1	2	3	4	4	2	3	3	7	8	8	8	8	7	7	6	5	4	3	2	4	4.4	9	13	15 (1340)
18	4	3	3	1	2	...	2	2	2	2	4	4	6	6	7	4	4	2	3	6	5	5	4	3	3.4	8	13	17 (1315)
19	2	3	2	5	6	7	8	9	11	11	11	12	12	12	13	14	13	10	7	5	4	5	5	5	7.9	16	16	24 (1523)
20	2	2	...	1	3	2	3	4	4	4	4	4	5	6	5	6	6	8	7	5	3	2	2	4	3.6	8	14	16 (1357)
21	...	...	...	...	...	...	...	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)
31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (N/A)

mean

speed N/A 5.3

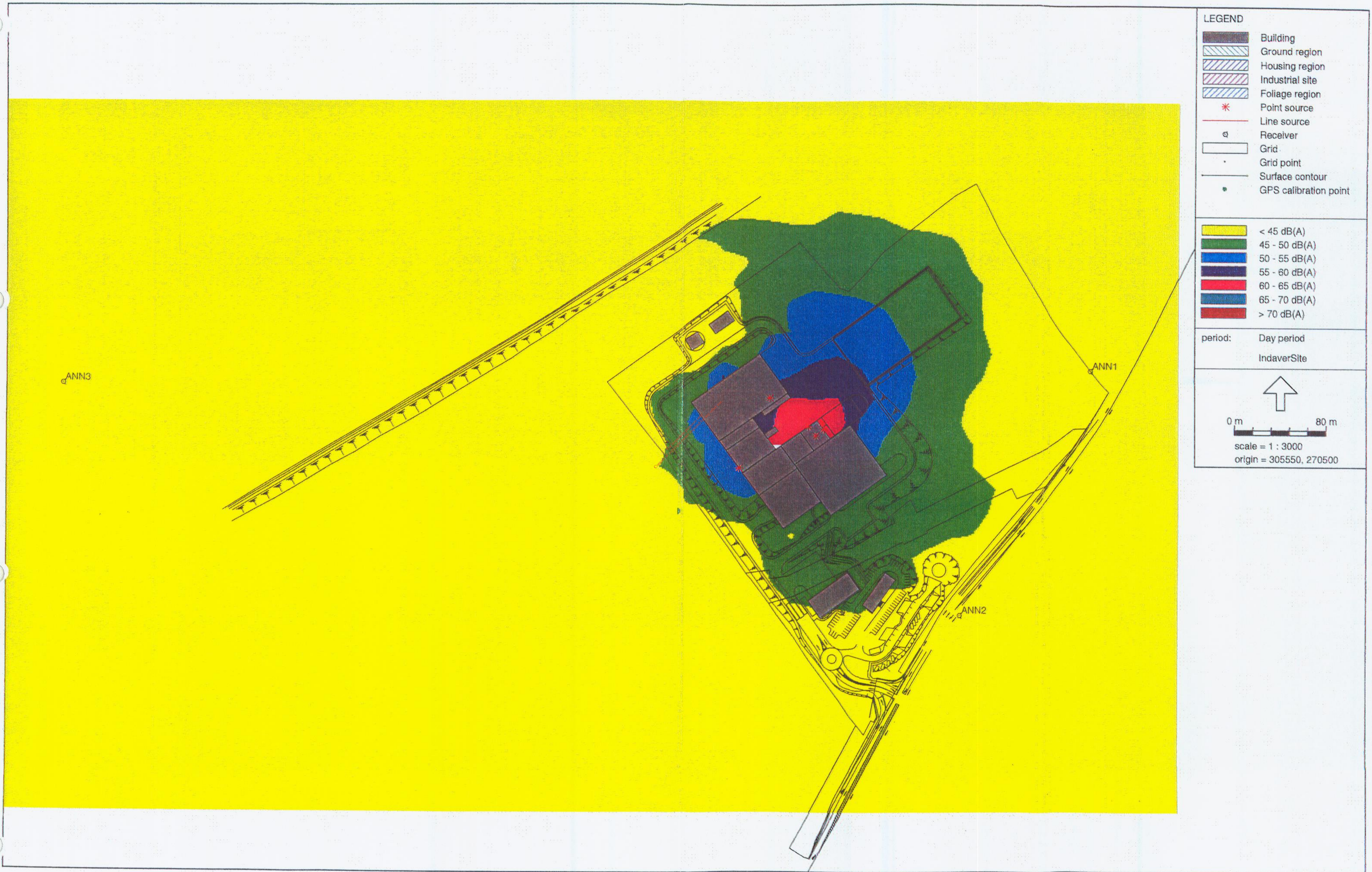
Highest gust was 36 knts on the 10 th Highest 10 minute wind was 24 kts on the 10 th ... indicates calm

indicates that the value was tabulated over a ten minute period.

ATTACHMENT I

NOISE MODELLING REPORT

*For inspection purposes only.
Consent of copyright owner required for any other use.*

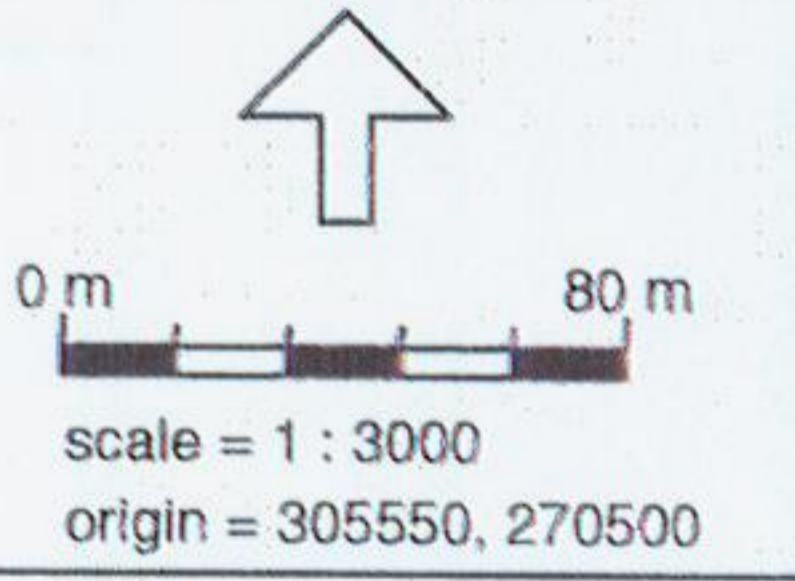


LEGEND

	Building
	Ground region
	Housing region
	Industrial site
	Foliage region
	Point source
	Line source
	Receiver
	Grid
	Grid point
	Surface contour
	GPS calibration point

	< 45 dB(A)
	45 - 50 dB(A)
	50 - 55 dB(A)
	55 - 60 dB(A)
	60 - 65 dB(A)
	65 - 70 dB(A)
	> 70 dB(A)

period: Day period
IndaverSite





Document Lead Sheet

PM Project No: 002666-05

Document No: 002666-22-RP-007

INDAVER IRELAND

WASTE MANAGEMENT FACILITY CARRANSTOWN

NOISE MODELLING REPORT

For inspection purposes only.
Consent of copyright owner required for any other use.

ISSUE	DATE	ORIG	AUTH CHK	REVIEW	APPRVD PM	APPRVD CLIENT	DESCRIPTION
A	30/04/01	CB	BC.		MG		For Information

CONTENTS

1.	INTRODUCTION	3
2.	NOISE MODELLING	4
	2.1 Noise Model	4
	2.2 Brief Description of ISO 9613-2: 1996	4
	2.3 Noise Model Input Data	5
3.	NOISE MODEL RESULTS	7
4.	DISCUSSION	9

ATTACHMENT 1

Sound Power Levels for Equipment Input To Noise Model (1 Page)

ATTACHMENT 2

Contour Plot of Predicted Noise Levels

*For inspection purposes only.
Consent of copyright owner required for any other use.*

1. INTRODUCTION

Indaver Ireland propose to construct a Waste Management Facility at Carranstown, Co. Meath.

Project Management Ltd. (PM) were requested by Indaver Ireland to carry out an assessment of external noise sources at the proposed Waste Management Facility and the contribution of these noise sources to noise levels on the site boundary and the closest noise sensitive receptors.

Modelling of the noise emissions from the principal external noise sources was carried out to predict noise levels at site boundary and noise sensitive locations. This report details the results of the noise modelling.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

2. NOISE MODELLING

The purpose of the modelling was to assess the contribution of external noise sources at the proposed Waste Management Facility to noise levels on the boundary of the site and at noise sensitive locations close to the site.

2.1 Noise Model

The Bruel & Kjaer Predictor Type 7810, Version 2.10 software package was used to model the noise levels being emitted to the surrounding environment from the Toner building. Predictor Type 7810 is a proprietary noise calculation package for computing noise levels in the vicinity of industrial sites. Calculations are based on the International Standard ISO 9613-2: 1996 "Acoustics – Attenuation of Sound Outdoors – Part 2: General Method of Calculation." This method has the scope to take into account a range of factors affecting the attenuation of sound including:

- the magnitude of the noise source in terms of sound power;
- the distance between the source and the receiver;
- the presence of obstacles such as screens or barriers in the propagation path;
- the presence of reflecting surfaces;
- the hardness of the ground between the source and receiver;
- attenuation due to atmospheric adsorption;
- meteorological effects such as wind gradient, temperature gradient and humidity.

Calculations are performed in octave bands from 63 Hz to 8 kHz as well as in overall A-weighted decibels (dBA).

2.2 Brief Description of ISO 9613-2: 1996

ISO9613-2:1996 calculates the noise level based on each of the factors discussed above. However, the effect of meteorological conditions is significantly simplified by calculating the average downwind sound pressure level, $L_{AT}(DW)$, for the following conditions:

- Wind direction at an angle of $\pm 45^\circ$ to the direction connecting the centre of the specified receiver region with the wind blowing from source to receiver, and;
- Wind speed between approximately 1ms^{-1} and 5ms^{-1} , measured at a height of 3m to 11m above the ground.

The equations and calculations also hold for average propagation under a well developed moderate ground based temperature inversion, such as commonly occurs on clear calm nights.

The average downwind sound pressure level from any point source at a receiver location, $L_{AT}(DW)$, is determined by calculating $L_{PT}(DW)$ which is the equivalent continuous downwind octave-sound pressure level at the receiver location. This is calculated for each point source, and its image sources, and for the eight octave bands with nominal midband frequencies from 63Hz to 8 kHz. The equation for calculating this parameter is given below:

$$L_{PT}(DW) = L_w + D_c - A$$

where:

- L_w is the octave band sound power level produced by the point source;
- D_c is the directivity correction for the point source;
- A is the octave band attenuation that occurs during propagation, namely attenuation due to geometric divergence, atmospheric absorption, ground effect, barriers and miscellaneous other effects.

The agreement between calculated and measured values of $L_{AT}(DW)$ support the estimated accuracy shown in Table 2.1.

Table 2.1: Estimated accuracy for broadband noise of $L_{AT}(DW)$

Height, h*	Distance, d†	
	0 < d < 100m	100m < d < 1000m
0 < h < 5m	±3dB	±3dB
5m < h < 30m	±1dB	±3dB

* h is the mean height of the source and receiver.

† d is the mean distance between the source and receiver.

Note These estimates have been made from situations where there are no effects due to reflections or attenuation due to screening.

2.3 Noise Model Input Data

Indaver have previously carried out a noise source monitoring survey of equipment at one of their waste management facilities in Belgium. This involved octave band analysis measurements for a variety of equipment to determine sound power levels for the equipment. These sound power levels were used as input data to the model for the principal noise sources (equipment) at the Carranstown site. The equipment and associated sound power levels input to the model are detailed in Attachment 1. The location of the principal noise sources at the Carranstown site is shown on the noise contour plot in Attachment 2.

The input data for each noise source included:

- The source position (national grid co-ordinates)
- The source elevation (metres)

- Directivity
- Noise Emission – The octave band analysis sound power levels determined for each source were A-weighted and input to the model. The model then calculates an overall sound power level (dBA) for each source. (In accordance with ISO 9613-2, the sound power levels at 31 Hz were not input into the model).
- Working Hours – The model allows the user to define daytime and night-time periods, so that noise levels can be predicted for each period eg. Daytime / Night-time. For the purposes of this assessment, in order to predict the maximum possible noise levels, all of the noise sources were assumed to run continuously throughout a 24-hour period.
- Link Option – Any proposed noise sources, in the form of louvres on building facades, were linked to their respective building which discards any reflection from the building surface.

The principal buildings on the site were all input in the model. Predicted noise levels are calculated for a set of receiver points, which can be chosen by the user. For this assessment, three locations were chosen as the receiver points for the model. These receiver points (ANN1, ANN2, ANN3) represent the closest noise sensitive receptors (dwellings) to the Carranstown site. The locations (national grid co-ordinates) and elevations (metres) of the receiver points (Noise Sensitive locations) were input to the model. The locations of the receiver points are shown on Noise level contour plot in Attachment 2.

The ground conditions between the noise sources and the receptor points were also included in the model. A background map of the Carranstown site was included in the model for reference purposes.

For inspection purposes only.
Consent of copyright owner required for any other use.

3. NOISE MODEL RESULTS

Table 3.1 details the predicted maximum noise levels (dBA) at the three closest noise sensitive locations due to the external noise sources at the Carranstown site.

Table 3.1: Predicted Noise Contribution (dBA) from the Carranstown site at Noise Sensitive Locations

Receiver Point	Predicted Noise Level (dBA)
ANN1 - House to north east at site boundary	41
ANN2 - Houses to south east across the road	42
ANN3 - House to west across railway embankment	28

The noise sources in the input data can be ranked in order of their contribution to noise levels at the chosen receiver points, and thus the noisiest sources at each receiver point can be identified. Tables 3.2 to 3.4 detail the four highest contributing noise sources at each of the three receiver points.

Table 3.2: Highest contributors to noise level at ANN1

Source Ref No.	Source Description	Predicted Noise Contribution (dBA)
S3 RO12	Air condensers above Turbine building	38
S15 RO12	Chimney	35
S1 RO12b	Louvre fan 2 Turbine building	31
S2 RO12	Turbine cooling	28

Table 3.3: Highest contributors to noise level at ANN2

Source Ref No.	Source Description	Predicted Noise Level (dBA)
S3 RO12	Air condensers above Turbine building	40
S15 RO12	Chimney	38
S1 RO12a	Louvre fan 1 Turbine building	20
S2 RO12	Turbine cooling	8

Table 3.4: Highest contributors to noise level at ANN3

Source Ref No.	Source Description	Predicted Noise Level (dBA)
S15 RO12	Chimney	28
S19 RO12	Louvre grids compressor	16
S3 RO12	Air condensers above Turbine building	9
S1 RO12a	Louvre fan 1 Turbine building	5

Noise level predictions can be made for a grid of receiver points and coloured iso-contours of the noise levels can be displayed to give an overall picture of the spatial distribution of noise levels within the grid. Figure 1 in Attachment 2 is a site plan of the Carranstown showing iso-contours of the predicted noise levels due to external noise sources at the waste management facility.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

4. DISCUSSION

The Environmental Protection Agency (EPA) Guidance Note for Noise in Relation to Scheduled Activities recommends that, during the daytime, noise levels at noise sensitive locations should be kept below an $L_{Aeq,T}$ value of 55 dBA, and at night-time, to avoid disturbance, the noise level at noise sensitive locations should not exceed an $L_{Aeq,T}$ value of 45 dBA. It also states that audible tones and impulsive noise at sensitive locations at night should be avoided, irrespective of the noise level.

The results of the noise modelling (Table 3.1), shows that the contribution of the combined external noise sources at the proposed waste management facility to noise levels at noise sensitive locations is relatively low and is below both daytime and night-time EPA recommended limit values. The contribution of individual noise sources (Tables 3.2 to 3.4) to noise levels at noise sensitive locations is also low. It is not anticipated that any of the equipment located at the proposed facility will have tonal or impulsive properties, and therefore there will not be any impulsive or tonal noise audible at noise sensitive locations.

The predicted noise levels are based on all of the identified external noise sources running simultaneously and continuously over a 24 hour period and therefore represents a worst case scenario. The actual contribution of external noise sources to noise levels at noise sensitive locations would probably be less than the predicted levels in Table 3.1.

In conclusion, the noise modelling demonstrates that the noise emissions from the external noise sources at the proposed waste management facility, will not cause the noise limits recommended by the EPA for noise sensitive locations to be exceeded.

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT 1

SOUND POWER LEVELS FOR EQUIPMENT INPUT TO NOISE MODEL (1 PAGE)

*For inspection purposes only.
Consent of copyright owner required for any other use.*

SOUND POWER LEVELS FOR EQUIPMENT INPUT TO NOISE MODEL

Source Description	Ref. No	National Grid Co-Ordinates	Elevation (m)	Octave Bands Hertz (Hz) Sound Power Levels (dBA) per band								
				63	125	250	500	1K	2K	4K	8K	Total
Louvre fan 1 Turbine building	S1 RO12a	306254.2, 270888.6	6.35	58.6	67.4	80.4	86.3	87.1	82.3	77.2	68.6	91.1
Louvre fan 2 Turbine building	S1 RO12b	306268.0, 270886.3	6.35	58.6	67.4	80.4	86.3	87.1	82.3	77.2	68.6	91.1
Turbine Cooling	S2 RO12	306266.6, 270892.3	1.5	66.8	71.9	78.4	85.5	82.9	80.0	75.7	67.9	89.0
Air condensers above Turbine building	S3 RO12	306261.0, 270880.5	16.2	81.2	83.8	88.3	93.2	91.7	88.6	84.6	74.1	97.5
Chimney	S15RO12	306220.7, 270914.0	32.75	84.2	91.6	95.3	82.2	78.9	73.6	74.9	76.1	97.4
Louvre grids Compressor	S19RO12	306194.0, 270742.4	10.85	50.2	59.7	71.9	82.2	80.1	76.0	71.1	69.2	85.4

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT 2

CONTOUR PLOT OF NOISE LEVELS

<u>DRG NO.</u>	<u>TITLE</u>	<u>REV.</u>
Figure 1	IsoContours of Noise Levels from Carranstown Site	

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT J

REVISED SITE NOTICE AND NEWSPAPER ADVERTISEMENT

*For inspection purposes only.
Consent of copyright owner required for any other use.*

APPLICATION TO PLANNING AUTHORITY

In response to the request for further information by Meath County Council on the 14th of March 2001 in respect of application no. 01/4014. The site boundary has been altered to incorporate a deceleration lane, the entrance detail has been revised to remove the acceleration lane. These alterations can be seen on the revised Ordnance Survey map submitted along with all other responses to the further information requests in the revised EIS.

WE, INDAVER IRELAND

MAKE APPLICATION TO

MEATH COUNTY COUNCIL

For

Planning Permission to construct

A Waste Management Facility at Carranstown, Duleek, Co. Meath. The facility will consist of a Main Process Building of 13,480sqm incorporating a Waste Reception Hall, Waste Sorting Plant, Bunker, Operations/ Turbine Building, Boiler, Grate Furnace, Ash Bunker, Demineralisation Unit, Boiler Feed Pumps, Flue Gas Treatment Building Solidification Unit, AC Unit, Turbine Cooler and 40m High Stack. Ancillary structures will consist of a Pumphouse Building of 200sqm, Waterstorage Tank, Warehouse Building of 890sqm incorporating Security and Drivers Rest Area, Administration Building of 770sqm, Transformer Compound, Laydown Area, Carparks and an on Site Puraflo Effluent Treatment System. The facility will also include a Community Recycling Park incorporating a Security Building, container storage area and canopied area. Road access will be via a new entrance from the R152, approximately 3Km from Duleek and 4Km from Drogheda. An Environmental Impact statement is accompanying this application, which will be available together with any further information, submitted, at the offices of the Planning Authority, Meath County Council, Railway Street, Navan, Co. Meath. This application relates to an activity, which is subject to an IPC licence under Part IV of the Environmental Protection Act 1992 and a waste licence under Part V of the Waste Management Act, 1996.

**THIS APPLICATION CAN BE INSPECTED DURING OFFICE HOURS
AT**

**PLANNING DEPARTMENT,
MEATH COUNTY COUNCIL,
RAILWAY STREET,
NAVAN,
CO. MEATH**

wd.le
AN, 25 Turnapin Cot-
 A delightful semi-det. cot-
 ting enormous rear garden.
 Living kit, 2 beds, bath,
 1, 83 sq.m. (678 sq.ft.)
 Price Region £185,000
 950. View by appt.
 FitzGerald Drumcondra
 37.
ALKIN Palmerstown
 exc. 3 bed s/d, gch,
 dg win, wooden floors,
 extras, £130K. Property
 rs Brady & Co 4578909
ALKIN @ 459 1400
 ord Pk. Rd.....£148,000 +
 wood from.....£128,000 +
 wood Crescent.....£149,950 +
 erty Rise.....£149,000 +
 erty Rise.....£200,000 +
 ile Ave. x 2.....£169,950 +
 dale from.....£135,000 +
 erty Gate Vll.....£169,000 +
 field Grove.....£139,950 +
 Park.....£210,000 +
 old Lawns.....£200,000 +
 er English 459 1400
E, 112 Hansfield. Beauti-
 presented and ideally
 family home. Acc: Liv-
 it./b'fast, 3 beds (1 pen
 bath, 111 sq.m., 200
 sq ft approx. Price Region
 500 (£209,550). View by
 Sherry FitzGerald Castle-
 820 1800.L
ILLA Lohunda. Fine 4 bed
 n suite, gch, many extras.
 s £125K. Ph: Baxter Auct.
 733
ILLA, Woodvale, charm-
 bed semi/d in quiet cul-de-
 sath many extras. Offers
 s £128K. Flynn & Assoc.
 662
SILLA, 46 Castlefield
 4 bed (master ensuite),
 detached, popular develop-
 2 receptions, large
 n, guest WC and basin.
 Quick sale. Region
 000. Douglas Newman
 Blanchardstown 8224455.
ARF, Clontarf Rd: Attract-
 a lodge res within walking
 ce of DART stn. 40 sq m /
 q ft lounge, kit/b'fast, bed,
 ar, GFCH, alarm, rear gar-
 Excess £220,000. Gunne
 w 833 5844.
ARF, Greenore, 41 Mt.
 ect Ave. Magnificent res.,
 Living, dining, kit./b'fast,
 uly, w.c., 4 bed, bath,
 ar rm., O.F.C. 142 sq m,
 5 sq ft approx. Guide
 £225,000 (£666,750).
 Sat 3-4.30pm. Auction
 esday 20th June at 4pm.
 y FitzGerald Killester 833

(AMENDMENT) ACT, 2001
 (COMMENCEMENT) ORDER,
 2001
 The Tánaiste and Minister for
 Enterprise, Trade and Employ-
 ment, Mary Harney, T.D., in
 exercise of the power conferred
 on her by section 13(3) of the
 Industrial Relations (Amend-
 ment) Act 2001 has made an
 Order entitled as above.
 This Order appoints the 31st
 day of May, 2001 as the day on
 which the Industrial Relations
 Amendment Act, 2001 comes
 into operation.
 Copies of the Order may be
 obtained from the Government
 Publications Sales Office, Sun
 Alliance House, Molesworth
 Street, Dublin 2 or by mail order
 from Government Publications,
 Postal Trade Division, 4-5
 Harcourt Road, Dublin 2. Price
 60p (€0.70).
 P. HARAN,
 Secretary General.

**Department of
 Enterprise, Trade
 and Employment**

TENDERS

**GALWAY HARBOUR COM-
 PANY
 DREDGING OF CHANNEL**

Tenders are invited from com-
 petent Contractors for the
 dredging of the approach chan-
 nel to Galway Harbour. Approxi-
 mately 80,000m of material is to
 be dredged from the bed of the
 channel and disposed of in a
 designated spoil ground.
 Tender documents may be
 obtained from the Galway Har-
 bour Company, Harbour Office,
 New Docks, Galway on pay-
 ment of a deposit of £100
 returnable on receipt of a bona
 fide tender.

Tenders are to be lodged with
 the Harbour Master, Galway
 Harbour Company, Harbour
 Office, New Docks, Galway on
 or before 1700 hrs on the 2nd
 July 2001. The lowest of any
 tender will not necessarily be
 accepted.

LEGAL

**THE HIGH COURT
 BANKRUPTCY
 In the Matter of
 G. J. HAND
 (otherwise ROY HAND)
 of Willbrook House,
 Whitechurch Road,
 Rathfarnham, Dublin 14
 Gentleman, a Bankrupt
 NOTICE is hereby given that
 the creditors of the above
 named G. J. Hand (otherwise
 Roy Hand) are required, on or
 before the 21st day of August**

12 PG
 3h 20m

PEARL HARBOR
 Prog 2.00 3.30 6.00 7.20

THE MUMMY RETURNS
 Prog 2.25 5.25 8.20

RENÉE ZELLWEGER COLIN FIRTH HUGH GRANT

BRIDGET JONES'S DIARY
 Prog 1.50 4.05 6.20 8.45

MORGAN FREEMAN

3.55 **along came a spider**
 8.40

Houston's other problem

1.45 **the Dish**
 6.25

LIV TYLER MATT DILLON JOHN GOODMAN

one night at McCool's
 Prog 2.15 4.25 6.35 8.50

screen D'Olier Street
 BOOKING 672 5500 3.30pm
 60p Credit Card Service charge

COLIN FARRELL 18s
TIGERLAND
 Prog 2.10 4.15 6.25 8.35

NICOLAS CAGE 15 PG
**CAPTAIN CORELLI'S
 MANDOLIN**
 Prog 2.25 5.20 8.10

Prog 2.30
BEST IN SHOW
 4.30 6.30

15 PG
**CROUCHING TIGER
 HIDDEN DRAGON**
 8.30

TENDERS

PEARL HARBOR (12 PG)
 12.35 1.25 4.05 5.00 7.50 8.40

THE MUMMY RETURNS (12 PG)
 2.15 5.15 6.55 8.30 9.35

BRIDGET JONES'S DIARY (15 PG)
 3.00 5.15 7.30 9.50

ONE NIGHT AT Mc COOL'S (18)
 12.50 3.05 5.20 7.30 9.50

15 MINUTES (18)
 1.40 4.20 7.00 9.40

CAPTAIN CORELLI'S MANDOLIN (15 PG)
 3.30 6.20 9.15

SEE SPOT RUN (PG)
 2.35 4.50

ALL THE PRETTY HORSES (15 PG)
 1.30 4.05 6.40

ALONG CAME A SPIDER (15 PG)
 2.20 4.45 7.20 9.35

TRAFFIC (18)
 9.10

SPY KIDS (PG)
 1.45

screen D'Olier Street
 BOOKING 672 5500 3.30pm
 60p Credit Card Service charge

COLIN FARRELL 18s
TIGERLAND
 Prog 2.10 4.15 6.25 8.35

NICOLAS CAGE 15 PG
**CAPTAIN CORELLI'S
 MANDOLIN**
 Prog 2.25 5.20 8.10

Prog 2.30
BEST IN SHOW
 4.30 6.30

15 PG
**CROUCHING TIGER
 HIDDEN DRAGON**
 8.30

TENDERS

60p Credit Card Service charge

PROGS FROM TUES 4th-THURS 7th JUNE

PEARL HARBOR (12 PG)
 1.00 3.25 4.20 7.05 8.05

SERIES 7- THE CONTENDERS (18)
 1.10 3.30 5.30 7.30 9.30

THE MUMMY RETURNS (12 PG)
 2.00 3.10 5.00 6.00 7.50 8.50

BRIDGET JONES'S DIARY (15 PG)
 2.20 4.40 7.00 9.20

ONE NIGHT AT Mc COOL'S (18)
 2.45 5.00 7.15 9.30

CAPTAIN CORELLI'S MANDOLIN (15 PG)
 3.15 6.05 8.55

ALONG CAME A SPIDER (15 PG)
 1.40 4.05 6.45 9.20

15 MINUTES (18)
 3.45 6.25 9.05

SEE SPOT RUN (PG)
 2.30 4.50 7.05

ALL THE PRETTY HORSES (15 PG)
 1.15 3.40 6.05

THE DISH (PG)
 9.20

TRAFFIC (18)
 8.30

SPY KIDS (PG)
 1.45

TENDERS

**Office of the Revenue Commissioners
 Invitation to Tender**

Open Procedures- Public Service Contracts Directive 92/50/EEC as amended by 97/52/EEC.

- Awarding authority: Revenue Commissioners, Customer Service Unit, 4th Floor, Setanta Centre, Nassau Street, Dublin 2. Telephone +353-1-6716777 Fax +353-1-6710960.
- (a). Award procedure: Open procedure.
- (b). Type of contract: The provision of a service to input data from Form P45 part 1 to the off-line application of the Revenue On-Line Service (ROS) for upload via the Internet at times to be determined.
- (a). Opening of tenders - persons admitted: Selected officials of the Revenue Commissioners.
- (b). Date, hour and place: 4.00 p.m. (local time) on Thursday, 9 August 2001, address as at 1.
- Deposits and guarantees required: Details, as appropriate, will be included in the tender document.
- Financing and payment: Details, as appropriate, will be included in the tender

call your starline now!

Aries MAR 21 - APR 20
 Have the courage to make necessary changes, even if you are unsure of the future. You are better alone, than lonely in a partnership. Call me for more details.
 Call 1560 131 464

Taurus APR 21 - MAY 21
 Starting new projects is always much more exciting than having to finish them, but you will be haunted by incomplete business if you don't deal with outstanding stuff.
 Call 1560 131 465

Gemini MAY 22 - JUN 21
 Always a curious sort, don't let your curiosity become nosiness today, because you are dying to find out the truth in a friends domestic or home situation.
 Call 1560 131 466

Cancer JUN 22 - JUL 21
 A family secret may come out today, and whatever you think, be careful how you react, others will be looking to you for you to take a leading role.
 Call 1560 131 467

Leo JUL 22 - AUG 23
 Words of praise for a young or inexperienced individual mean much more than you realise, and you could have quite a role to play here.
 Call 1560 131 468

Virgo AUG 24 - SEPT 22
 Your interest in health matters and the practicalities of life creates a bond with someone special who becomes a wonderful influence and help to you.
 Call 1560 131 469

Libra SEPT 23 - OCT 22
 You should have a wonderful day today, Libra, with everything important like love, romance, friendship and home life falling into place perfectly. You just cannot put
 Call 1560 131 470

Scorpio OCT 23 - NOV 22
 Today will probably be a day of extreme highs and lows, you are more vulnerable than usual to other peoples moods and emotions, so avoid any negative situations.
 Call 1560 131 471

Sagittarius NOV 23 - DEC 20
 You love and find it easy to make new friends, and you have such a gift for connecting with other people that nobody remains a stranger long around you.
 Call 1560 131 472

Capricorn DEC 21 - JAN 20
 Money and position are important to you, but recently you discovered that human connections and commitment are much more important. You may have to prove this to a close friend.
 Call 1560 131 473

Aquarius JAN 21 - FEB 19
 Someone who has become increasingly important in your life recently may act strangely, it could be that they are testing your commitment to your new relationship.
 Call 1560 131 474

Pisces FEB 20 - MAR 20
 Finding a way to maintain the status quo, while still working towards your personal dreams will be much easier, but you will have to take a stand.
 Call 1560 131 475

iTouch
 Citywest, Co. Dublin Tel: 01-4112021 www.itouch.ie wap.itouch.ie
 Calls cost 75p per minute (Incl Vat)

Fun Stuff
 direct

ATTACHMENT K

LETTERS FROM ESB REGARDING DIVERSION OF POWER LINES AROUND CARRANSTOWN SITE

*For inspection purposes only.
Consent of copyright owner required for any other use.*



**NATIONAL
GRID**

ESB NATIONAL GRID
ELECTRICITY SUPPLY BOARD
Lower Fitzwilliam Street, Dublin 2, Ireland.

Telephone: 01-6765831 / 6771821
Telefax: 01-6615375


Bord Soláthair an Leictreachais
Sráid MacLiam Íochtair, Baile Átha Cliath 2, Éire.

Your ref:

Our ref:

5th April 2001

Ms Laura Burke
Indaver Ireland Limited
4 Haddington Terrace
Dun Laoghaire
Co. Dublin

 Rec'd	Original to File No. 002666.21.0100
Date:	4 MAY 2001
Copy to:	MARIA GLOVER. MICHAEL HOYNE
Action:	

ORIG-TO FILE .

Dear Laura,

This note sets out the nature of ESB National Grid's discussions with Indaver Ireland Limited from April to June 2000.

In April of 2000, Indaver Ireland Limited had preliminary discussions with ESB National Grid regarding their proposed development near Platin, Co. Meath. The main focus of this discussion was the requirement to divert a 110kV overhead line that runs through the proposed development site. ESB National Grid agreed to undertake a preliminary study on the options to divert this line using ESB International as consultant. A Confidentiality Agreement was undertaken between ESB National Grid and Indaver Ireland Limited at this stage and as such ESB International were not informed of the developer's name.

In June of 2000, ESB National Grid reported back to Indaver Ireland Limited on the preliminary investigation into the diversion of the 110kV line passing through the proposed development site. The options presented were of a preliminary nature as the ESB were not in possession of detailed site layouts and no site surveys were carried out. It was pointed out at this stage that the position of buildings, cranes and chimneys would influence the feasible line diversion options.

There was no further contact between ESB National Grid and Indaver Ireland Limited on this matter until March 2001 when the issue of the Planning Application arose. In order to progress the diversion of the 110kV line I would ask that you contact us so that the options can be looked at in more detail and a decision made on the preferred option.

I trust the above is satisfactory, if you have any queries please feel free to give me a call.

Yours sincerely,

Simon Tweed
Transmission Implementation Planning
ESB National Grid



**NATIONAL
GRID**

ESB NATIONAL GRID
ELECTRICITY SUPPLY BOARD
Lower Fitzwilliam Street, Dublin 2, Ireland.

Telephone: 01-6765831 / 6771821
Telefax: 01-6615375

Bord Soláthair an Leictreachais
Sráid MacLiam Íochtair, Baile Átha Cliath 2, Éire.


Your ref:

Our ref:

FS\

19 April 2000

Ms Laura Burke
Indaver Ireland Limited
4 Haddington Terrace
Dun Laoghaire
Co. Dublin

 Rec'd	Original to File No: 00 2666.21.0100
Date:	4 MAY 2001
Copy to:	MARIA GLOVER, MICHAEL HOYNE
Action:	

ORIG TO FILE

Dear Laura,

Please find enclosed two copies of the ESB National Grid Confidentiality Agreement. Please sign and witness both copies and return them to us for countersignature. We will then return one to you for your records.

In relation to the 110kV line diversion discussed at our meeting yesterday we will be in touch over the next week to discuss how to progress this issue.

I trust the above is satisfactory, if you have any queries please feel free to give me a call.

Yours sincerely,

Fintan Slye
Manager, Transmission Implementation Planning
ESB National Grid

For inspection purposes only. No other use.
Consent of copyright owner required for all other use.



**NATIONAL
GRID**

ESB NATIONAL GRID
ELECTRICITY SUPPLY BOARD
Lower Fitzwilliam Street, Dublin 2, Ireland.

Telephone: 01-6765831 / 6771821
Telefax: 01-6615375

Bord Soláthair an Leictreachais
Sráid MacLiam Íochtair, Baile Átha Cliath 2, Éire.

Your ref:

Our ref:

24th April 2001

Ms Laura Burke
Indaver Ireland Limited
4 Haddington Terrace
Dun Laoghaire
Co. Dublin

	Original to File No: 002666-21-0100
	Date: 4 MAY 2001
Copy to:	MARIA GLOVER, MICHAEL HOYNE
Action:	

ORIG TO FILE

Dear Laura,

This note is to confirm the nature of the meeting between ESB and Indaver Ireland Limited on the 24th April 2001.

Representatives from ESB National Grid, ESB International, Indaver Ireland Limited and Project Management Limited met in ESB National Grid's office on the 24th April 2001 to discuss the diversion of the Finglas-Platin 110kV overhead line that runs across a site being developed by Indaver Ireland Limited.

The options under further consideration as a result of this meeting are:

- Diversion of the overhead line to the east of the site towards the railway line maintaining the line as overhead type construction.
- Replacing the overhead line with an underground cable and running around or through the site back to Platin 110kV substation.

In order to determine the best feasible option, further site investigation and consultation is required. ESB are currently progressing this work in co-operation with Indaver Ireland Limited.

I trust the above is satisfactory, if you have any queries please feel free to give me a call.

Yours sincerely,

Simon Tweed
Transmission Implementation Planning
ESB National Grid

