Notices and Advertisements

Contents

Attachment B5.1 Drawing No. 2666-22-DR-007: Location of Site Notices

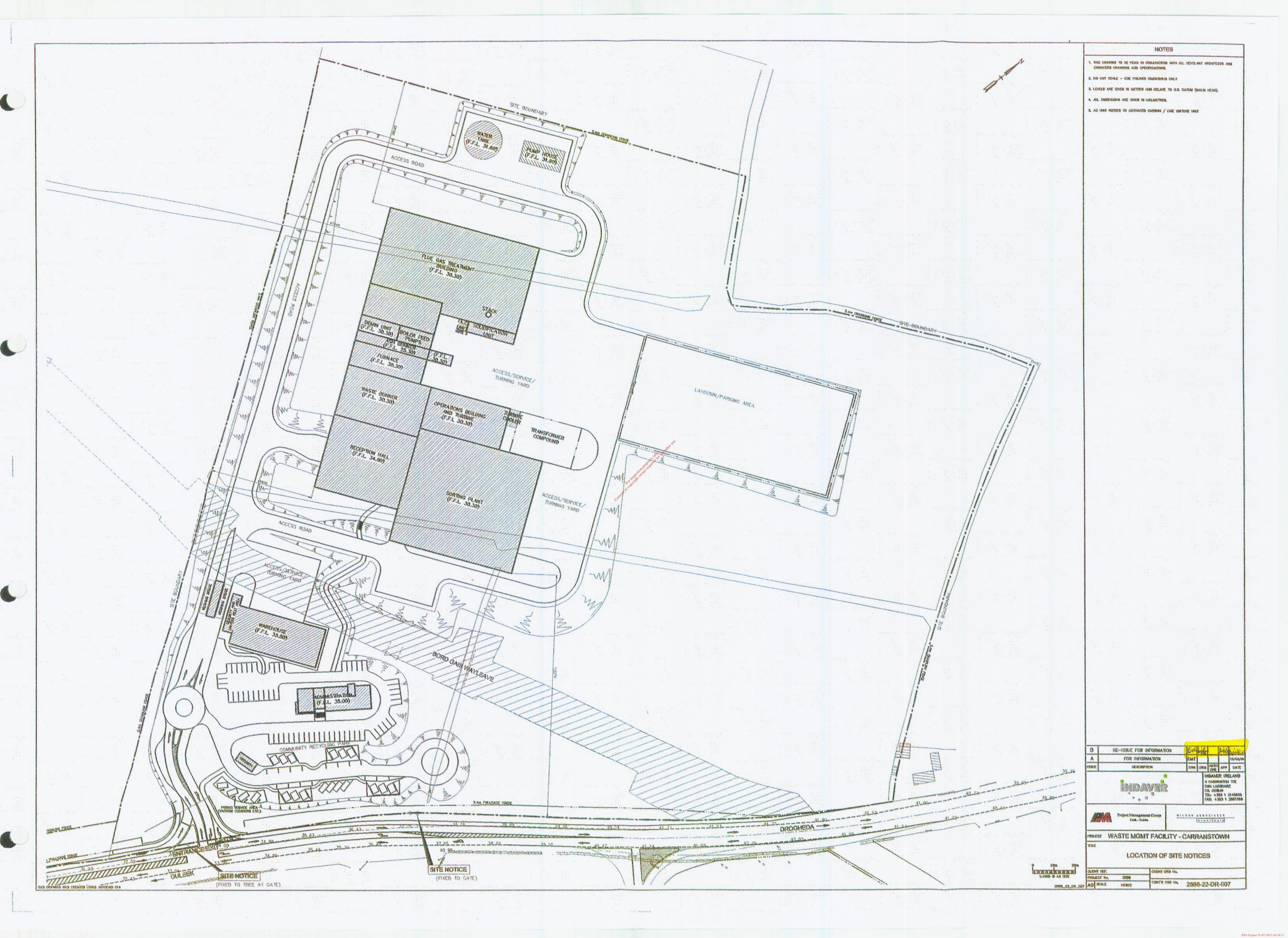
Attachment B5.2 Text of Site Notice

Attachment B5.3 Copy of Newspaper Advertisement

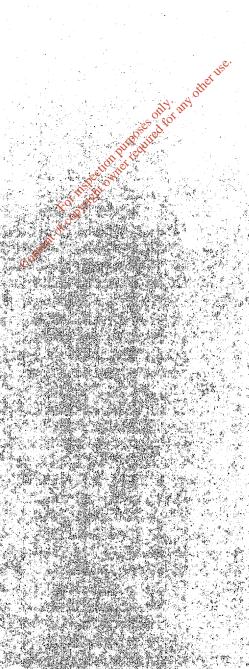
Attachment B5.4 Copy of Letter to Local Authority

Attachment B5.1 Drawing No. 2666-22-DR-007: Location of Site Notices





Attachment B5.2 Text of Site Notice



APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE LICENCE

Indaver Ireland, 4 Haddington Terrace, Dun Laoghaire, Co Dublin, intends to apply to the Environmental Protection Agency for a Licence. The principal class of activity under the Fourth Schedule of the Waste Management Act, 1996, as amended, is as follows:

9. Use of any waste principally as a fuel or other means to generate energy.

The following other activities will take place at the site:

Third Schedule

- Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
- 13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Fourth Schedule

- Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
- 3. Recycling or reclamation of metals and metal compounds.
- 4. Recycling or reclamation of other inorganic materials.
- 6. Recovery of components used for pollution abatement.

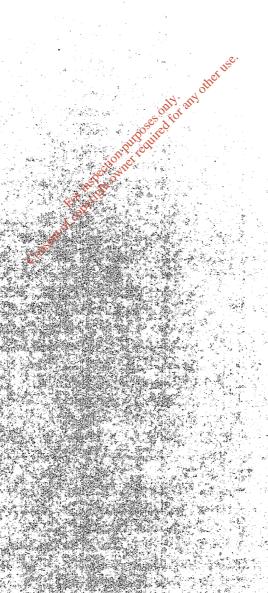
13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

The application relates to the proposed waste management facility at Carranstown, Co Meath – National Grid Reference 3063E, 2709N. A copy of the application for the licence may be inspected at or obtained from the headquarters of the Agency at Johnstown Castle Estate, Co Wexford as soon as it is practicable after receipt by the Agency of the application for the licence.

The application is being accompanied by an Environmental Impact Statement (EIS). The EIS together with any further information relating to the application, as may be furnished to the Agency in the course of the Agency's consideration of the Application, will also be available from the headquarters of the Agency. A copy of the EIS has already been submitted to Meath County Council as part of the Planning Application.

EPA Export 25-07-2013:16:34:12

Attachment B5.3 Copy of Newspaper Advertisement



DUSE one bed of floor, £220 3-5p.m. 2 bed apt., 2 st let, suit 2/3, dng, £950 p.m.

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2755661
, MARTELLO
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£700 p.m.
086 2367030
tunning refurb.
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SWANTED

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Newsagents es 667 0099. SHED Conve-Leasehild for h: 492 1142



SALE

100k/£463 p.m. 497 0500 K ROAD, The nding 2 bed d/g PVC wins. tal and DCU. WD 674 9181 roadford Park pacious 3 bed the south facing ated at end of c. C.105 sq.ft. O.N.O.Rathgar

46 Ardgillan ed s/d res in lopment. Decostandard and such as PVC indows, GFCH. ng room, dining st room, en suite, sss £170,000. In Good Sker-

IDS, Ivy Court. ed thouse. d/g ony, numerous iospital. Region I 9181

Why pay rent when you can buy? 2 & 3 bed hones from \$90K. Showhome on view Sun, 3pm—5pm. Phone Bresc Estates Ltd., 045-866033 or Contact REMAX 0502-63220.

Contact REMAX 0502-63220.

RATOATH RD Moulden Bridge,
17mls city centre. Showhouses now for sale. 3 bed s/d and 4 bed s/d's & det. View Sun 3-5.
Ross McParland 6671888

RHODE, Co. Offaly. Unbeatable!
New 3 bed. s/d homes. en-suite, carpets curtains blinds, qual.
FTBG. From £92,000. Youngs
(01) 4975581 / 087 9915643

SWORDS. 3 bed s/d bungalow SWORDS, 3 bed s/d bungalow £135k GWD 840 7400.

£135k GWD 840 7400.

TARA HILL, GOREY, Co. Wexford. 1,800 sq. ft. dormer bungalow under construction. £155k, completed value £250k.

Tel. 087 9293851

TEMPLEOGUE Rushbrook. Super 3 bed, completely refurbished. Immaculate. Quick sale £199k. O' Connor Shannor, 496 8111.

WHITEHALL, LARKHILL ROAD.
Extd. 2/3 bed end tce. GFCH.
60ft. west facing rear garden, 2
mins. from DCU. Excess £145K.
GWD 874 9181

WICKLOW TOWN Ashvale House, stunning det bung. c. ½ acre, sea views, c. 3,000 sq ft. Immac cond. Close to N11 and town. £375,000. Dooley Poynton Aucts 0404/62292

HOUSESTOLET

AA NORTHSIDE — Houses wntd. Prof. Tenants. 878 0357. AA TRADING PLACES urgently need prop. Advice on 475 5544. BEAUMONT WOODS D.9 Bright and spacious 3 bed showhouse located in this popular and ame-nable dev. Suit 3 profs. £1,000 p.m. Tel. Caroline 086 8240701

BUNBEG, CO. DONEGAL centrally located house to let, sleeps 6. Ph: 075 31065

let, sleeps 6. Ph: 075 31065

D4 Beside Lansdowne Dart, Lux, spac, 3 bed duplex, Ff., parking, Sult 3/4 profs, or family. £1400 p.m. Ph: 086 6044411

D4, 3 bed, 2 lge, recs, fitted kit, secure off street parking, lge gdn., decor to high standard. £2,000 pm. Ph: Helen 6615525

D6W, HAROLD'S CROSS, Mount Argus, 4 bedroom, fulliby Argus, 4 bedroom, fully furnished, gfch, parking Ph. 490 1123.

Ph. 490 1123.

D.7 Rathdown Sq. Charming 2 bed. Parking, £900 p.m. Suit 2/3 profs. Odessa Estates 8308711

MERRION GROVE Off Stillorgan Rd. lux 3 bed duplex, 1 en-suite, f/f, parking, 46A Q.B.C., one year lease. PH 278 0203

year lease. Ph 270 0203
MOUNT MERRION 4 bed det.
bungalow, fully furn, all mod
cons, OFCH. Contact Elleen or
Donal @ Gate Properties
041 9800737/086 6070123

RANELAGH VILL. in city, lux. 1-bed. quiet renovated house, f/f, patio/deck, prof. £1,100pm. Short let. Blackdoor 6612463.

Short let. Blackdoor 6612463.

RATHFARNHAM Moyville sunny
4 bedroom house, suit 4/5 profs.
Fully furn., gfch, alarm, etc,
£1,000pm. Ph 087 8319971.

RATHFARNHAM: 4 Bed Lge Mod
House. En-suite. Wooden floors.
F/f GFCH. Suit Profs only. Avail
immed. Tel 087 2528220 pm

RATOATH CO MEATH 3 bed det bungalow, centre of village, OFCH, gardens. Property Part-ners Brady Fitzgerald 801 5700. TALLAGHT 3 + 5 beds. from £900 PM., K.M.W **450 5299**

INDUSTRIAL PREMISES

AIRPORT BUS PK Warehouse with offices, short term lease, 1.896 sq. m. Shane Redmond Rogers Chapman 840 1944.

Rogers Chapman 840 1944.

BLANCHARDSTOWN - Prime Industrial Location, two new units to let, 2,800 sq.ft, and 6,500 sq.ft, ft. F.J. Frisby 2800760

CITY CENTRE, Dublin 2. (Hanover Quay off Pearse Street). Self contained units available on short term basis. Rangling in size from 900 sq.ft. to 25,000 sq.ft. Suit a variety of uses including distribution and warehouse. Available immediately. Ph: 494 5700

CITY CENTRE warehouse, adi.

CITY CENTRE warehouse, adj. Capel St. and fruit markets, c.678sq.m./7,300sq.ft. Short term. Norths 4332222

CLONSKEAGH SQ: 670 sq.m. (7,210 sq.ft.) 33 cars. Entire building to let by assignment. Quinn Agnew 662 3113

AME ST. newly decorated offices. 242 sq.m. high profile building, central location, low rent. Quinn Agnew 662 3113

D2 quality open plan, high spec offices, short term, 308 sq. m. Quinn Agnew 662.3113 D8 ISLANDBRIDGE Modern open plan offices, excellent loca-tion, competitive rent. 296 sq.m. Quinn Agnew 662.3113

D8 OFFICES / PRIVATE parking. Ph 4731267

LEIXLIP Main Street, selection of prime offices to rent from 300 sq. ft., avail. immediately. French Estates 624 2320

LUXURY SERVICED Office Suites to let in Fitzwilliam Business Centre. Suitable for 1 - 5 people. Boardroom and secure car parking spaces available. Tel 662 0448.

I 98 052 0448.

OFFICE SUITE 57 sq.mtrs. (613 sq.ft.). Unit 10, Inns Court, Wine Tayern Street, Dublin 8. Ideal for Solicitor or Barrister. Phone 496 6011

496 6011

RANELAGH New lux. mews, 4 rooms, ISDN, c-parking optional. £250 p.w. Tel: 087 2550293.

SANDYFORD Bus. Centre, 2 off suites, 279 & 506 sq.m., parking. Available short term. Tel: GVA Donal O'Buachalla 6762711

SWORDS Main St New Offices fr

SWORDS Main St New Offices fr 1,000-7,000 sq ft. A/con. O'Sulli-van MIPAV MCEI 846 1122

OVERSEAS PROPERTIES

AFFORDABLE Marbella Homes. Viva Estates, beautiful Hot Properties Free Cat. Apts, Villas, Fr. £98K. Freephone 1800-467467 or visit www.hotproperties.ie

LANZAROTE, COSTA TEGUISE. New 2 & 3. bed. apartments, 5 minutes from beach, communal pool, mortgages available. From IR£103,000. Lindsay Estates I.A.V.I; 816 8474

MANCHESTER last remaining

Estates I.A.V.I; 816 8474

MANCHESTER last remaining new lux. 1 bed apartment with parking. STG£46 000. Rental income STG £375p.m. Sterling finance arranged. Ph. 2789165

TORREVIEJA SPAIN Spacious Duplex Apartment overlooking med. 5 mln to Town -3 Bedrooms fittled kitchen, 2 batherooms, fully furnished, large sunterrace. A quiet private location No community fees to pay For quick sale £100,090 or 21,100000 Pts. Phone Dayline 041-9847390 Mob 083.2577321 or 041-9827789 after 6.p.m.

PREMISES TO LET

AT CONTARF — Warehouse/office to let, 1,000 scift. Alarm, parking. Ph. 087-6695788.

Ph. 087-6695788.

AT NAAS RD/M50 secure storage units - all sizes. Ph: 4036136.

BRAY Storage Units/light workshops fr £45 pw 087-2466605

D4 RINGSEND Building & vard avail. in one lot/seperately. Short term. Quinn Agnew 662 3113

FOOD PREPARATION UNIT, newly refurbished, D8 / Naas, Rd. area, 3 phase, air con., WC & Shower, very secure & accessible location. Ph. 4546333.

NAAS, 6,000 sq.ft. warehouse, which includes 600 sq.ft. office space, short/long term lease. Ph 087 2457718

NORTHSIDE - Secure container storage available for lease or rent. Close to M1 and M50. Tel: 087 2592322 / 01 8404026.

STORAGE SPACE 1,500 sq. ft. Dry goods. Office optional. Short term. Monkstown area. Tel: 087 6168258.

6168258.
STORAGE SPACE AVAILABLE in modern high bay warehouse, racked and unracked, beside M.50, 5,000 to 15,000 sq, ft. and would suit as Distribution Centre. Contact Jonathan on 01-6305955

01-6305955

WAREHOUSE TO LET c.7,000
sq. ft. Suit many uses. 3 Phase
power available. Good access.
Parking. £3.50 per sq. ft. Lease
available. Longmile Road. Ph.
01-820 5888 / 085 2575960

WORKSHOP & YARD to rent, rear of Sundrive Rd. All mod cons. Ph: 087 258 4733.

COUNTY WATERFORD: Kilmacomma: St. Marys; Gurteen.



APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE LICENCE

A WASTE LICENCE Indaver Ireland. 4 Haddington Terrace, Dun Lacghaire, Co. Dublin, intends to apply to the Environmental Protection Agency for a Licence. The principal class of activity under the Fourth Schedule of the Waste Management Act, 1996, as amended, is as follows: 9. Use of any waste principally as a fuel or other means to generate energy.
The following other activities will take place at the site: Third Schedule

Third Schedule

Third Schedule

12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.

13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Fourth Schedule Fourth Schedule

2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

Recycling or reclamation of metals and metal compounds. 4. Recycling or reclamation of other inorganic materials.

Recovery of components of for polition abatement. 13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other man temporary storage, pending collection, on the premises where such waste is produced.

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The application is being accompanied by an Environmental impact Statement (EIS). The EIS together with any further information relating to the application, as may be furnished to the Agency in the course of the Agency's consideration of the Agency, a copy of the EIS has already been submitted to Meath County Council as part of the Planning Application.

APPLICATION TO CORK COUNTY COUNCIL FOR A WASTE COLLECTION PERMIT **RELATING TO ACTIVITIES IN** (CORK COUNTY COUNCIL/ CORK CORPORATION AREA/AREAS)

I, DAVID BAILEY, of NAVAN, intend to make an application to Cork County Council (and/or) Cork Corporation.

Cork Corporation.

A copy of my application will be available for inspection or purchase at the principal office of Cork County Council, The Environment Dept. County Hall, Room 708 and Environment Dept., City Hall. Any member of the public may, within a period of six weeks of the application being published, make a written submission to the relevant Local Authority in relation to the said application.

Leeson Lane, Dublin 2.

PUBLIC NOTICES

PLSH 1400 3/04/01

IN THE MATTER OF THE LANDLORD AND TEN-ANT ACTS 1967-1994 AND IN THE MATTER OF THE LANDLORD AND TEN-ANT (GROUND RENTS) NO. 2 ACT 1978

AND IN THE MATTER OF AN APPLICATION BY COFFEYS [WEXFORD) LTD.

TAKE NOTICE that any person having any interest in the Free-hold Estate of the following property:-

ALL THAT AND THOSE the stores and premises at the rear of No. 56 South Main Street, Wexford.

TAKE NOTICE that the Applicant Coffeys [Wexford] Ltd., intends to submit an Application to the County Registrar for the County of Wexford for the acquisition of the freehold interest in the aforesaid property and any party asserting that they hold a Superior interest in the aforesaid property are called upon to turnish evidence of title to the aforementioned with 14 days from the date of this Notice.

In default of any such Notice being received the Applicant intends to proceed with the Application before the County Registrar at the end of 14 days from the date of this Notice and will apply to the County of Wexford on the 19th day of December 2001 for directions as may be appropriate on the basis that the person or persons beneficially entitled to the Superior Interest including the freehold reversion in the aforesaid property are unknown or unascertained.

Dated this 3rd day of December 2001

Signed: Maguire McErlean, Solicitors, 78-80 Upper Drumcondra Road,

Dublin 9

COMHAIRLE CONTAE FHINE GALL
FINGAL COUNTY COUNCIL Declaration of Roads to be Public Roads
Roads Act, 1993
In accordance with the provisions of the Roads Act, 1993
Fingal County Council hereby gives notice of its intention to consider the making of a Declaration that the roads listed hereunder be publics roads. This matter will be considered by Fingal County Council at its meeting to be held on Monday 11th February, 2002. Maps showing the roads may be inspected from 3rd December 2001 as follows:

Transportation Department, Fingal County Council, 4th Floor,

Fingal County Council,
4th Floor,
4th Floor,
46/49 Upper O'Connell Street,
Dublin 1.

Monday - Friday
9.30 a.m. - 12.30 p.m.
2.00 p.m. - 4.30 p.m.
The latest date for inspection of
maps is 11th January 2002.
Objections or representations
may be made in writing to the
senior Executive Officer, Transportation Department, Fingal
County Council, 46/49 Upper
O'Connell Street, Dublin 1. The
latest date for receipt of objections or representations is 25th
January 2002.
Housing Estate Roads
The Strand (Phase 1),
Donabate
Del Val, Sutton
South Hill, Sutton
Peter Caulifield

Peter Caulfield Senior Executive Officer TENDE

TIPPE

Submissi firms to Tipperar and the Suir. Details a

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Signed:

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Attachment B5.4 Copy of Letter to Local Authority





Mr. Michael Killeen, Planning Section, Meath County Council, County Hall, Navan, Co. Meath.

30/11/01

Application to the Environmental Protection Agency for a Waste Licence

Dear Mr. Killeen,

We wish to inform you that we, Indaver Ireland of 4 Haddington Terrace, Dun Laoghaire, Co. Dublin intend to apply to the Environmental Protection Agency for a Waste Licence for the Waste Management Facility at Carranstown, Duleek, County Meath – National Grid Reference 3063E, 2709No

The principal class of activity at the facility comes under the Fourth Schedule of the Waste Management Act, 1996 (As Amended) and is as follows:

9. Use of any waste principally as a fuel or means to generate energy

Additional activities to be carried out at the facility will also include the following:

Third Schedule

- Repackaging prior to submission to any activity referred to in a preceding 12. paragraph of this schedule.
- Storage prior to submission to any activity referred to in a preceding *13*. paragraph of this schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Fourth Schedule

- 2. Recycling or reclamation of organic substances, which are not used as solvents (including composting and other biological transformation processes).
- 3. Recycling or reclamation of metals and metal compounds.
- 4. Recycling or reclamation of other inorganic materials.

- 6. Recovery of components used for pollution abatement.
- 13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

The Environmental Impact Statement (EIS) and EIS Additional Information for the Waste Management Facility will accompany the waste licence application.

A copy of the waste licence application, the EIS & EIS Additional Information and such further information relating to the application, will, as soon as is practicable after receipt by the Agency, be available for inspection or purchase, at the headquarters of the Agency at Johnstown Castle Estate, Co. Wexford.

Yours faithfully,

Laura Burke, Project Manager,

Indaver Ireland

Type of Activity

Contents

Attachment B6.1

Type of Activity: Activity and other Activities on site

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B6.1 TYPE OF ACTIVITY

1. PRINCIPAL ACTIVITY

The principal class of activity under the Fourth Schedule of the Waste Management Act, 1996, will be as follows:

9. Use of any waste principally as a fuel or other means to generate energy.

The proposed waste to energy plant to be located at the site will be based on conventional grate incineration technology. This technology is proven and reliable and has been widely used in many countries worldwide. In summary, the incineration process will involve non-hazardous municipal and industrial solid waste material firstly being tipped into a bunker prior to being fed into the furnace. In the furnace the waste will be incinerated, producing heat, ash and combustion gases. The flue gases will then be cooled, filtered, passed through scrubbers and reheated prior to discharge via the stack. The waste liquids produced by the scrubbers will be used in the cooling process and a solid waste produced, rather than an aqueous liquid, thereby eliminating any process effluent from the facility. The heat produced by the combustion of the waste will be used to generate steam, which will be used to drive a steam turbine and electrical generator. The plant will produce approximately 14MW of electricity, approximately 11MW of which will be exported to the ESB distribution network, which is equivalent to supplying electricity to approximately 16,000 homes.

2. OTHER RELEVANT ACTIVITIES

The following other activities will take place at the site under the Third Schedule of the Waste Management Act, 1996:

12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.

This activity will occur on site if, for example, hazardous items such as cylinders or small quantities of laboratory materials are deposited at the community recycling park by mistake and it is necessary to repackage the material prior to sending it off site for disposal.

13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

This activity will take place at the site if, for example, non-recyclable material is deposited at the community recycling park by mistake and it is necessary to send the material off site for disposal. Materials, such as concrete blocks, may also be delivered as part of a load to the materials recycling facility that are not suitable for recycling or incineration and must be sent off site for disposal. All of the ashes and gypsum will be temporarily stored on site prior to off-site disposal. If a market exists for recycling of gypsum or bottom ash, these activities will be covered under activities 6 and 13 of the fourth schedule, as discussed below.

The other activities that will take place at the site under the Fourth Schedule of the Waste Management Act, 1996, are as follows:

2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

In the materials recycling facility, paper, cardboard, wood and plastics will be separated, baled where applicable and transported to appropriate licensed facilities for recycling.

3. Recycling or reclamation of metals and metal compounds.

The sorting process in the materials recycling facility will also involve the separation of metals. The metals will then be baled or put directly into containers and sent to appropriately licensed facilities for recycling. Metals will also be recovered from the bottom ash in the waste to energy plant and sent off site for recycling.

4. Recycling or reclamation of other inorganic materials.

Glass may be separated in the materials recycling facility and transported to appropriate licensed facilities for recycling.

6. Recovery of components used for pollution about ement.

Gypsum will be recovered from the wet flue gas cleaning system within the waste to energy plant. It can be used in the construction industry, and the gypsum recovery facility will be designed to comply with the standards required if a market exists, depending on the sulphur content of the waste.

13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

The segregated waste streams at the materials recycling facility and the different waste streams collected at the community recycling park will be stored on site prior to transport off-site for recycling by a permitted waste contractor. Waste may be stored in the bunker in the waste to energy plant for a period of 3 to 4 days prior to incineration. The bottom ash that will be produced in the furnace of the waste to energy plant is suitable for use in road construction and may be recycled if a market exists. If this material is suitable for recycling it will be temporarily stored on site prior to removal off site.

Fees

Contents

Fees of £15,000 apply to this application and is made up of £5,000 for waste recovery activities and £10,000 for waste disposal activities. There are no attachments.

Consent of copyright on

Quantity and Nature of Wastes

Contents

Attachment B8.1

Annual Quantities and Nature of Wastes

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1. COMMUNITY RECYCLING PARK

TABLE B8.1 ANNUAL QUANTITIES AND NATURE OF WASTES

Year	Nominal Capacity			Maximum Capacity		
	Non-hazardous waste (tonnes/annum)	Hazardous waste* (tonnes/annum)	Total annual waste quantity (fonnes/annum)	Non-hazardous waste (tonnes/annum)	Hazardous waste (tonnes/annum)	Total annual waste quantity (tonnes/annum)
1	1,791	9	1,800 os	4,482	18	4,500
2	1,990	10	2,000 on the feet	4,980	20	5,000
3	1,990	10	2,000	4,980	20	5,000
4	1,990	10	2,000	4,980	20	5,000
5	1,990	10	2,000	4,980	20	5,000

^{*} Small amounts of waste oil, fluorescent tubes and car and domestic batteries will be accepted at the Community Recycling Park (not expected to be greater than 20 tonnes/annum)

2. MATERIALS RECYCLING FACILITY

TABLE B8.1 ANNUAL QUANTITIES AND NATURE OF WASTES

Year	Nominal Capacity			Maximum Capacity		
	Non-hazardous waste (tonnes/annum)	Hazardous waste (tonnes/annum)	Total annual waste quantity (tonnes/annum)	Non-hazardous waste (tonnes/annum)	Hazardous waste (tonnes/annum)	Total annual waste quantity (tonnes/annum)
1	18,000		18,000	27,000	_	27,000
2	20,000	-	20,000	30,000	-	30,000
3	20,000	-	20,000	30,000	-	30,000
4	20,000	•	20,000 citation	30,000	-	30,000
5	20,000	-	20,000	30,000	-	30,000





3. WASTE TO ENERGY PLANT

TABLE B8.1 ANNUAL QUANTITIES AND NATURE OF WASTES

Year	Nominal Capacity			Maximum Capacity*		
	-Non-hazardous	::-Eazardous	Total annual	Non-hazardous	===Hazzardous	Total annual
	waste	waste**	waste quantity	waste	waste**	waste quantity
	(tonnes/annum)	(tonnes/annum)	(tonnes/annum)	(tonnes/annum)	(tonnes/annum)	(tonnes/annum)
1	135,000	-	135,000	162,000	-	162,000
2	150,000		150,000	25. 25 180,000		180,000
	150,000	- -	130,000	hit and 180,000	-	180,000
3	150,000	-	150,000 pin of the state of the	180,000		180,000
4	150,000	-	150,000	180,000	_	180,000
			or insight			
5	150,000	-	150,000	180,000	-	180,000

^{*} The proposed maximum design capacity of the waste to energy plant is 180,000 tonnes based on maximum plant availability and calorific value of waste.

^{**} Small quantities of household hazardous waste may be treated in the waste to energy plant if items such as batteries are placed in domestic rubbish. The design of the waste to energy plant means that it is capable of handling this material. However, it is anticipated that a household hazardous waste collection system will be in operation in Ireland to remove the majority of household hazardous waste from residual waste.

Major Industrial Hazard Regulations

Contents

Attachment B9.1

Confirmation of Non-applicability of Seveso Regulations (SI No. 476 of 2000), to Waste Management Facility



Indaver Ireland, Haddington Terrace, Dún Laoghaire

10 October 2001

Ref: 321-X004 FBS: 321.14.02.01

Re: Classification of Carranstown under Seveso Regulations (SI 476 of 2000)

Dear Sirs,

We have been requested by Ms. Laura Burke, Operations Manager, of Indaver Ireland to provide a technical opinion as to whether the proposed Municipal Incineration Plant at Carranstown, Co. Meath would be classified as a 'Seveso' site under the relevant "Seveso" regulations in force in Ireland. Byrne Ó Cléirigh are independent specialist technical consultants in the fields of Energy, Environment and Risk Management. Our work in the field of Risk Assessment includes over 10 years experience in the interpretation and implementation of the Seveso Regulations.

A new development can only qualify as a "Seveso" site if some or all of the provisions in the "European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations", (SI 476 of 2000) apply to the site. These Regulations, signed in December 2000, implement the EU Seveso II Directive 96/82/EC in Ireland.

At the time of preparing this letter (October 2001), the plant at Carranstown has not been built. Therefore, the facility cannot qualify as an "existing establishment" under the Regulations. However, the provisions in SI 476 relating to new establishments could be applicable to the Carranstown project. These regulations supersede previous Seveso legislation in Ireland applicable to new establishments.

SI 476 of 2000 is specifically concerned with, and limited to, <u>Major</u> Accident Hazards. It is not the function of the Regulations to address the day-to-day operation of establishments during normal operations. These activities, including the monitoring of emissions and their acceptability, are governed by other legislation, including the EPA Act and EIS legislation. SI 476 is designed to protect man and the environment from the impacts arising from Major Accidents at qualifying establishments.

For a facility to qualify as a Seveso site under SI 476, there must be the potential for a Major Accident <u>involving one or more dangerous substances</u> at the site. It should

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be noted therefore, that although a bridge collapse or a passenger train crash would be classified as Major Accidents in a wider context, they would not represent Major Accidents under SI 476 because they do not involve dangerous substances defined in the Regulations.

The Directive (EU) and the Regulations (Ireland) were drafted on the basis that there are certain minimum quantities of dangerous substances required for Major Accidents (as defined in SI 476) to occur. Therefore, both the Directive and the Regulations only apply to those establishments at which the quantities of dangerous substances present (or emitted under abnormal conditions) could exceed certain minimum thresholds.

Parts 1 and 2 of the First Schedule of the Regulations in SI 476 set out two threshold levels for 51 'named substances' and for 10 'categories of substances and preparations not specifically named (in the Directive)'. Formulae are provided in the notes to the First Schedule which may be used to assess the qualification of a specific site under SI 476. These formulae are based on addition rules that aggregate the quantities of dangerous substances on a site.

In order to determine if a site qualifies under SI 476, the complete inventory of all substances expected to be present on the site must be examined. Having applied the addition rules in the Regulations there are three possible outcomes.

- The site is not a Seveso site if the aggregated inventories of dangerous substances are below the lower of the two threshold levels set out in the First Schedule of the Regulations. In this case the site does not come under the remit of the Seveso Regulations.
- The site is a Lower Tier Seveso site if the aggregated inventories exceed the lower thresholds (set out in Column 2 of the Tables in Part 1 and Part 2 of the First Schedule) but are below the upper thresholds (set out in Column 3 of same). Such a site is deemed less hazardous that an Upper Tier Site and only some of the Regulations apply.
- The site is an Upper Tier Seveso site if the aggregated inventories exceed the upper threshold values. All of the Regulations set out in SI 476 of 2000 apply to Upper Tier Sites.

In order to provide an opinion on whether the proposed operation at Carranstown would be a classified as a Seveso site we undertook the following actions.

We extracted the inventory threshold data from the First Schedule of the Regulations and prepared an electronic version in the form of a Yes / No questionnaire. We requested Indaver Ireland to complete this questionnaire by clearly indicating whether each of the 'named substances' and each of the generic categories of dangerous substances are expected to be present on their site.



- In all instances where Indaver indicated that a substance would be present at the site, they provided data on the maximum inventory expected for each substance over a 5-year look ahead.
- In the cases of natural gas, dioxins and automotive petrol we estimated the inventories based on operational data supplied by Indaver.
- We documented and recorded the basis for all assumptions used in the calculation the inventories of dangerous substances.

Of the 51 named substances in the Regulations, Indaver predict that only the substances set out in Table 1 below could be present at the proposed facility.

Table 1: Review of Inventory of 'Named Substances'

Named Substance ¹	Max Quantity on Site (tonnes)	Lower Tier Threshold (tonnes)	Upper Tier Threshold (tonnes)	Expected Inventory as % of Lower Tier Threshold
Natural Gas – used as fuel, present in a gas pipeline	0.0066	500 ited of airs	200	0.0132
Polychlorodibenzofurans and Polychlorodibenzodioxins (including TCDD) calculated in TCDD equivalent – present in incoming domestic / municipal waste and also in 3 types of waste ash. (See Annex 1 for calculation of maximum inventory)	0.00000004	N/A	0.001	0.04
Automotive Petrol – present in fuel tanks of employees cars – based on 40 cars with 30 l/tank & petrol density of 0.7 kg/l	0.84	5,000	50,000	0.0168
Hydrogen Chloride ²	0.2	25	250	0.8

Notes:

- It can be assumed that the above are the only named substances that Indaver expect on their site. However, small quantities of other named substances could enter the site via household waste streams e.g. LPG in aerosols, traces of Ammonium Nitrate in used fertiliser sacks etc.
- 2. The material present on the site is aqueous Hydrogen Chloride as a 30% solution. The solution is not classified as a dangerous substance. However, we have included 200 kg of Hydrogen Chloride gas (which is a dangerous substance) because this could be evolved in the event of a spill of the 30 % solution.

As can be seen from the above table, the quantities of 'named substances' that are expected to be present on the Indaver site at any one time are well below the minimum thresholds which would qualify the site under SI 476 (Lower or Upper



Tier). In the case of dioxins the expected inventory is 2,500 times lower than the quantity which would qualify the site as a Seveso site based on dioxins alone. (See Tables 3 and 4 for the effects of aggregation of several substances.) Paragraph 4 of the introduction to the First Schedule of SI 476 states that "dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present if their location within an establishment is such that it cannot act as an initiator of a Major Accident elsewhere on the site."

Table 2: Review of Categories of Dangerous Substances not Specifically Named in SI 476

Category of Substance	Max Quantity on Site (tonnes)	Lower Tier Threshold (tonnes)	Upper Tier Threshold (tonnes)	Expected Inventory as % of Lower Tier Threshold
Dangerous for the environment in combination with the risk phrase R50 (very toxic to aquatic organisms):		अधीर्भः सम्पर्ध	tet lise.	
Indaver will store 50 tonnes of a 25% Ammonia Solution. This is used as chemical injected into incinerators to suppress NOx formation. A small amount is also used for water treatment.	50 For its pection of the property of the pro	puroses only any of	500	25
Dangerous for the environment in combination with the risk phrase R53 (may cause long term adverse effects in the aquatic environment):	5	500	2000	1
Indaver will store 5 tonnes of diesel fuel for machinery.				

Note: It can be assumed that the above are the only Categories of substances and preparations listed in Part 2 of the First Schedule that Indaver expect on their site. However, small quantities of other categories could enter the site via household waste streams e.g. trace quantities of flammable liquids, other materials that are dangerous to the aquatic environment in household cleaning agents etc.

The addition rules involve the calculation of a value, commonly referred to as the q/Q value, for each Seveso substance, where:

q = quantity of the substance present on the site;

Q = threshold quantity for either Lower or Upper Tier site.



The q/Q values are aggregated separately for all toxic substances and for all flammable substances present at the site. The results of these calculations are set out in Tables 3 and 4 below.

Table 3: Addition Rule for Toxic Substances at Proposed Indaver Facility

Substance	Q (tonnes)	Q _{Lower Tier} (tonnes)	q/Q
Dioxins	0.000004	0.001	0.0004
Ammonia Solution	50	200	0.25
Diesel Fuel	5.0	500	0.01
Sum q/Q for toxics		M- Marin III	0.2604

Table 4: Addition Rule for Flammable Substances at Proposed Indaver Facility

Substance	Q (tonnes)	Q _{Lower Tier} (tonnes)	q/Q
Natural Gas – in pipeline on site	0.0066	ses difer 50	0.000132
Automotive Petrol – in car park	0.84 to me t	5000	0.000168
Sum q/Q for Flammables	Fortyright		0.0003

Since the sums of all of the calculated q/Q values for both toxic and flammable substance groupings (based on the Lower Tier thresholds) are less than 1.0, the proposed facility would not be classified as a Seveso Site under SI 476.

Based on the information provided to us by Indaver Ireland, it is our view that the proposed incineration facility at Carranstown, Co. Meath is <u>not</u> one to which the Seveso Regulations apply i.e. the site is not a Seveso site.

Indaver may use this letter, when it is quoted in full, for the purpose of informing discussions with planning authorities, An Bord Pleanála and/or members of the public.

Yours sincerely

Thomas Cleary BE, C Eng, Eur Ing, FIChemE, FIEI

Partner



Annex 1

Estimation of Dioxin Inventory on Site

An estimate of the maximum dioxin inventory on the Carranstown site was conducted as set out below.

The dioxins on the site are associated with different waste streams including incoming municipal solid waste and by-product ash streams. In order to calculate the maximum combined inventory the design basis and operating philosophy were provided by Indaver. Dioxin concentrations in the individual waste streams were provided by Indaver based on operating experience with municipal waste incineration facilities in Belgium.

Table A1: Derivation of Maximum Dioxin Inventory on Carranstown site

Material Containing Dioxin	Maximum Quantity of waste expected to be on the site at any time (tonnes)	Dioxin Concentration (pg TEQ/g)	Maximum Dioxin Inventory (g)
Incoming Municipal Waste	4,800	50 ²	0.24
Bottom Ash	¹⁰ 07 ¹ 1,500	5 ³	0.01
Boiler Ash	att of 100	216 ³	0.02
Flue gas cleaning residue	200	653 ³	0.13
Total	-	-	0.40

Notes:

- 1. Based on proposed plant design philosophy, bunker sizes, inventories etc.
- 2. Based on measurements by VITO laboratory, Belgium.
- 3. Measurements by IAWG (International Ash Working Group).

The total expected inventory is 2,500 times lower than the quantity which would qualify the site as a Seveso site based on dioxins alone.