33

ORAL HEARING INTO

PROPOSED DECISION 186-1

RINGASKIDDY WASTE MANAGEMENT FACILITY

PROOF OF EVIDENCE

John Ahern

INDAVER IRELAND

1. QUALIFICATIONS & EXPERIENCE

My name is John Ahern. I have a Degree in Chemical Engineering from University College Dublin. I am the General Manager of Indaver Ireland and Managing Director of Indaver Ireland Limited. I joined the company in 1995. Previously I worked for 14 years in the LPG (Liquefied Petroleum Gas) industry. I have 25 years experience of dealing with hazardous substances including Seveso sites.

2. PROJECT DESCRIPTION

Indaver Ireland is seeking a waste licence for the operation of the following:

- Community Recycling Park
- Waste Transfer Station
- Incineration Plant
  - Fluidised Bed Incinerator & Liquid Incinerator
  - Grate incinerator

3. PHASE I & II

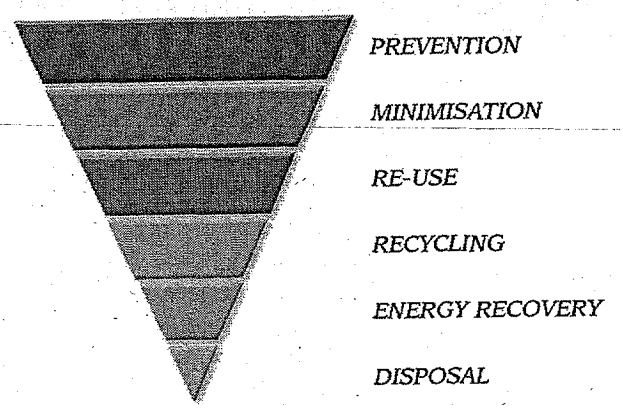
It is planned to develop the waste-to-energy facility in two phases. The first phase will include the Community Recycling Park, the Waste Transfer Station, the Fluidised Bed Incinerator and a liquid waste incinerator. The second phase will consist of the grate incinerator.

While Indaver has applied to the Environmental Protection Agency for a waste licence for the operation of both phases the company has only applied for planning permission for Phase I of the facility. The decision to proceed with applying for planning permission for Phase II of the facility will be taken when the waste strategies of the Cork Local Authorities, and the requirements of other waste producers, have been defined. Indaver has applied for a waste licence for both phases so that the EIS and the Agency could assess the cumulative impact of both phases on the environment.

We cannot construct Phase II without Planning Permission.

4. WASTE POLICY

Waste Hierarchy

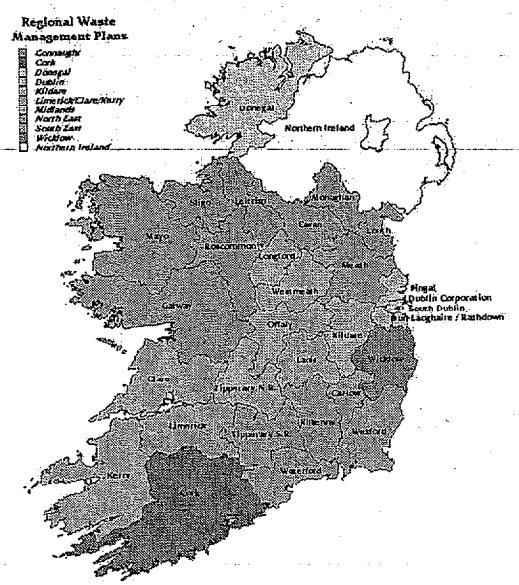


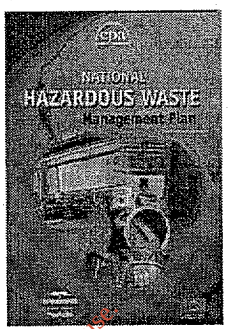
Irish waste policy has its origins in the European Unions 5th and 6th Environmental Action Programmes. These programmes state that member states should adopt the waste hierarchy when managing waste. They state that member states should first try to prevent waste, if not preventable they should minimise waste and continue on down the hierarchy through reuse, recycling, energy recovery and only as a last resort should we dispose of waste to landfill.

The Department of the Environment implements this policy in Ireland through the 1998 policy document "Changing Our Ways". This policy was strengthened by a second policy paper titled "Preventing and Recycling Waste – Delivering Change"

5. WASTE PLANS

Ireland ensures the waste hierarchy is practised by preparing plans for the delivery of a waste management service. There are Regional Waste Management Plans for each region in Ireland and a National Hazardous Waste Management Plan for hazardous waste.

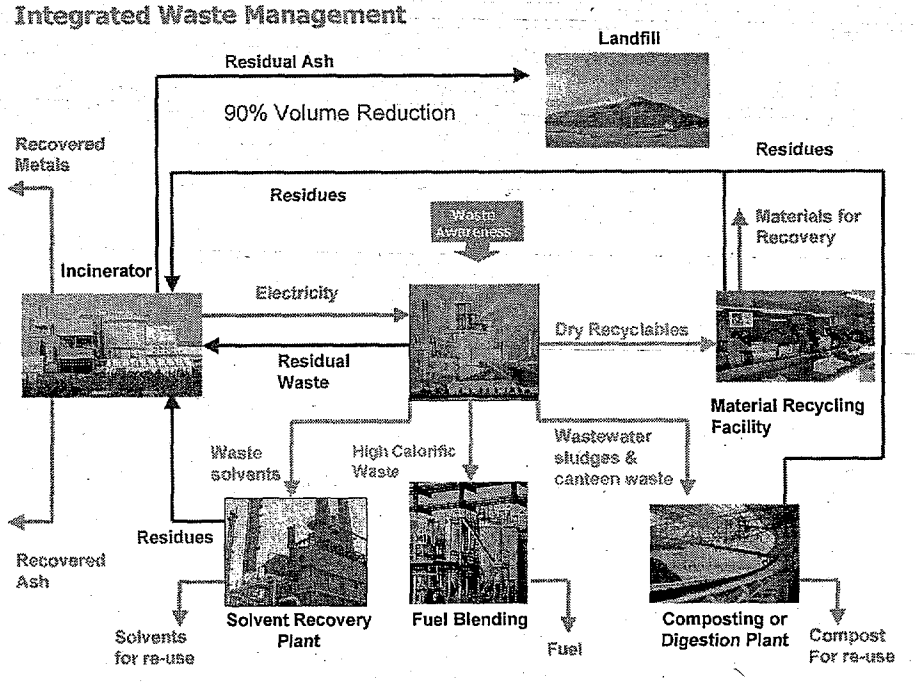




6. INTEGRATED WASTE MANAGEMENT (IWM)

Hazardous Waste

The system most commonly used to apply the waste hierarchy is called Integrated Waste Management. This system of waste management works by segregating waste into its components or streams and utilising different technologies for each waste component or stream. The integrated waste management system works for either hazardous or non hazardous waste. I have produced below a simplified integrated waste management system for a typical pharmaceutical plant producing hazardous waste.



At the centre of the system in such a facility is waste awareness. Unless staff in this facility are aware of the waste system being followed by the plants management the plant will not be successful in implementing an IWM system. This must be achieved through training and management. Good waste awareness will lead to good segregation of waste.

If waste is well segregated it is possible to manage the first waste stream ie dry recyclables easily. This stream will usually consist of wood, paper, cardboard, glass and plastic for example. Each of these components of waste can be recycled in recycling plants such as paper mills, glass foundries etc.

A second common stream in a pharmaceutical plant may be wastewater treatment sludge. This stream can usually be treated in a waste composting or digestion plant. The residual waste, if it is of good quality, can be used as compost in agriculture.

Clean high calorific waste solvents can be used to manufacture a fuel that can be used to replace fossil fuels in a cement kiln.

Some solvents can be recycled in solvent recovery plants and reused as clean solvents.

The remaining streams of waste in an IWM system should be sent to an incineration plant. In this type of facility any energy contained in the waste can be recovered and any harmful characteristics can be stabilised. Waste in this stream would typically consist of mixed solvents that cannot be separated, are aqueous or that contain chemicals that are not suitable for cement kilns. This stream may also consist of off specification or out of date pharmaceutical products, contaminated protective clothing or wastewater treatment sludge that cannot be used in agriculture.

An incinerator has the advantage of producing electricity that can be used in industry. In addition metals can be recovered from the ash and some of the ash can be reused as aggregate replacing virgin aggregate.

Finally we see the principal advantage of an incinerator in that it reduces the volume of the residual waste stream by 90%. This dramatically reduces the volume of waste going to landfill in line with the waste hierarchy.

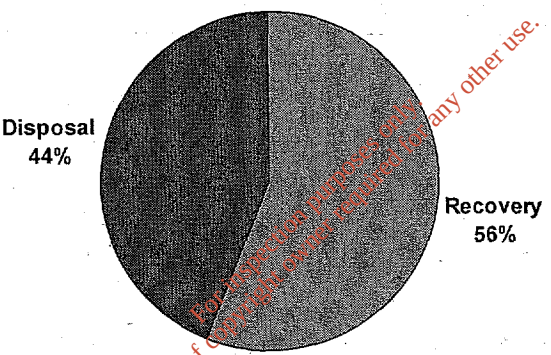
The incinerator is also used to dispose of residual waste from recycling plants, where for example, inappropriate waste has been sent for recycling.

Hazardous Waste Statistics in Ireland

In Ireland IWM is used by most pharmaceutical plants under their IPPC licences. This has led to a high level of recovery at 56% (National Waste Database Report 2001). Of the waste that goes for disposal 62% is dealt with in Ireland. The remaining 38% that is exported for disposal is sent to Britain, Holland, Belgium, Germany, Denmark and Finland for incineration.

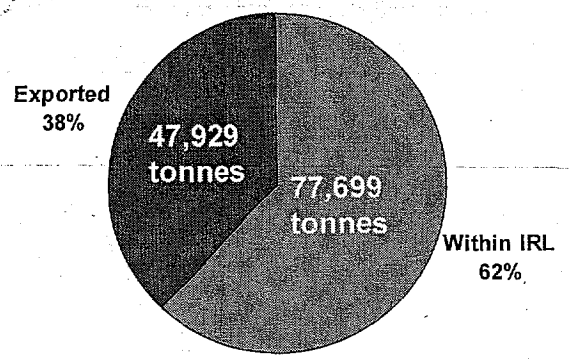
Our proposed facility in Ringaskiddy would dispose of this waste stream and make Ireland self sufficient in the management of its hazardous waste in line with European policy.

What Happens to Irish HazWaste



National Waste Database Report 2001

Waste For Disposal



National Waste Database Report 2001

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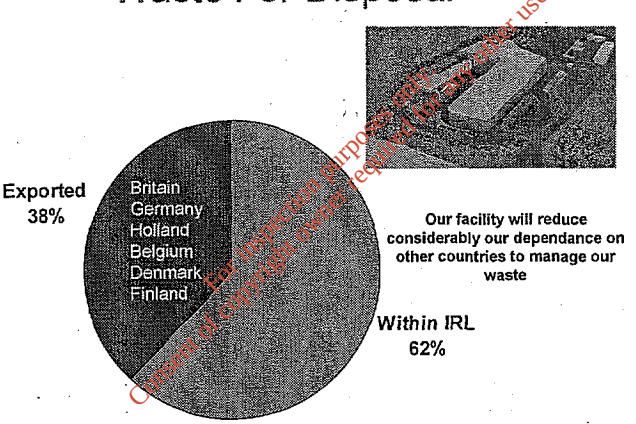
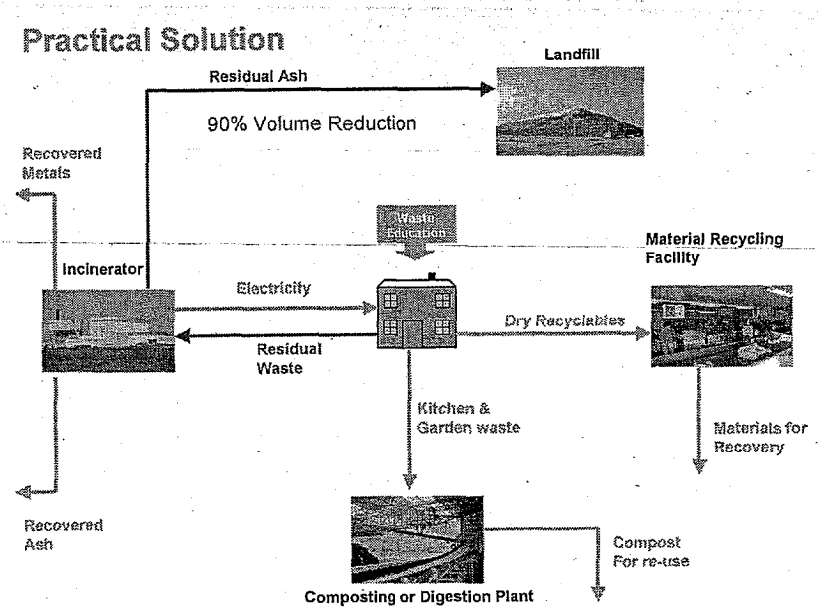


Non Hazardous Waste Management in Ireland

A similar Integrated Waste Management system is planned for non hazardous waste in Ireland. Again waste awareness is a key part of the strategy and most people will be aware of the current "Race Against Waste " campaign that is currently running in newspapers, magazines, on posters, on the radio and on television. . If the public follow the advice given in this campaign and if waste facilities are constructed in line with the Regional and National Waste Plans, Ireland will be able to manage its waste in a much more environmentally sustainable way that it has done heretofore as was envisaged in the original policy document titled "Changing Our Ways". Progress has however been slow in developing this necessary infrastructure for a number of reasons.

An IWM system for non hazardous waste works in a similar way to the system shown for hazardous waste. Segregation of waste is the key to this system. If waste is not mixed in the first instance it is possible to recover more resources from it.



IWM in Cork

IWM is planned in Cork under their Regional Waste Management Plan. The system proposed does not however incorporate all the possible components in a full IWM system.

The Cork plan does not include either kerbside collection of dry recyclables or compostable material or the use of an incinerator. Indaver have made a submission to the Cork authorities suggesting that a fuller IWM system should be employed. This proposed system would be more in keeping with best practice in Europe where IWM is more developed.

At the centre of the current Cork strategy is a mechanical separation facility. The non recyclable resides from this facility should be sent to an incinerator as they still contain energy and only the resultant ash should be landfilled or recovered..

It is encouraging to note that the plan has already been changed since it was adopted and that kerbside collection of dry recyclables is now taking place in many areas. This should in our opinion be supplemented with kerbside collection of organic waste and the use of an incinerator to recover energy and reduce the volume of non-recyclable waste.

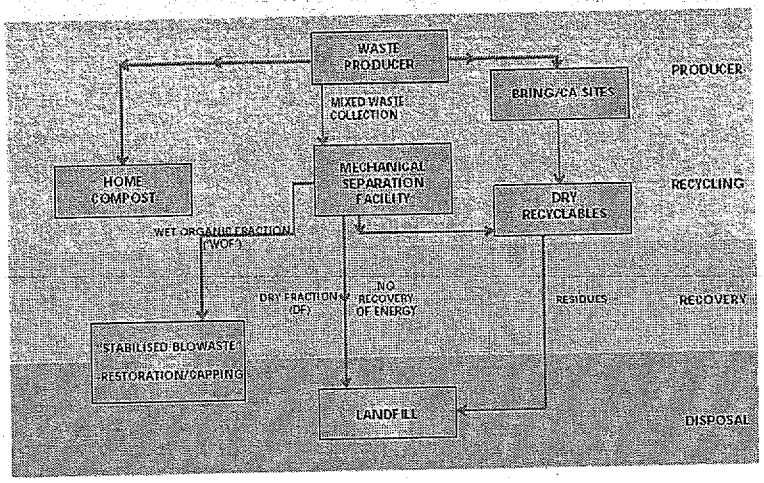


Figure 2.1 Cork City Council
Current Waste Plan Policy ('Scenario 2')

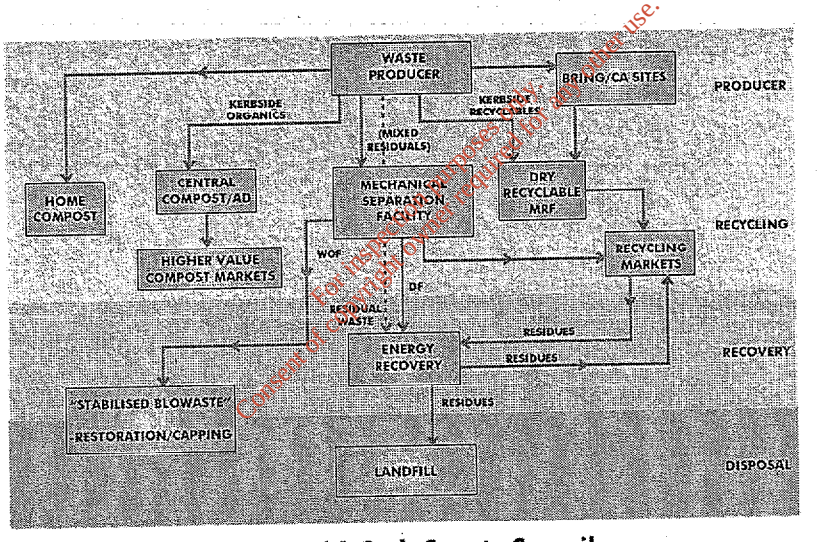
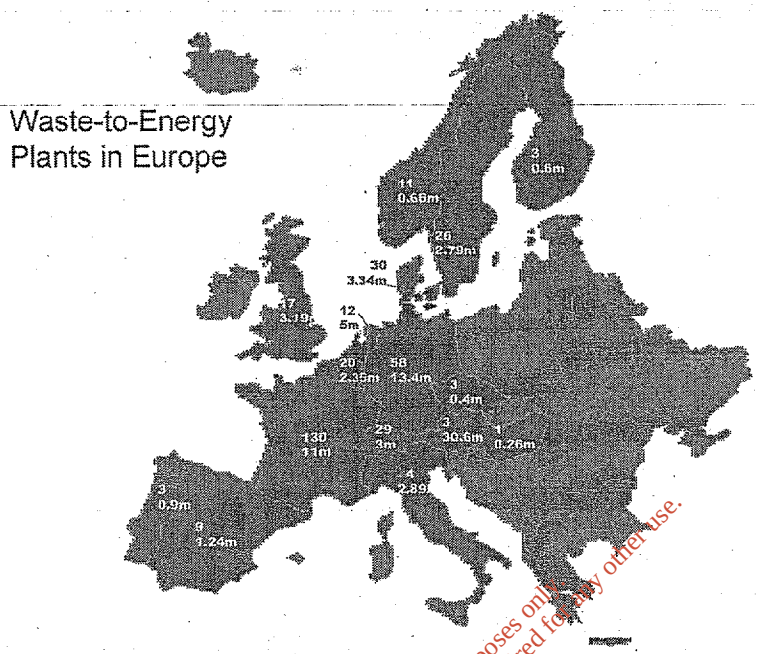


Figure 4.1 Cork County Council
Proposed Integrated Policy Direction

7. INCINERATION IN EUROPE

IWM is practised throughout Europe. Incineration as part or an IWM system is practised in almost every country of Europe. The attached map shows the number of plants in each country and the annual quantity of waste being incinerated there.



Incineration is growing in Europe not declining. Some older smaller plants are being replaced with more modern but larger facilities. For instance an incinerator closed in St Nicholas, Flanders recently but the community of that town are now sending their waste to our incineration facility in Beveren.

Europe is moving away from landfill towards recycling, reuse, recovery and incineration with energy recovery as they collectively provide a more sustainable way for the world to live. We believe Ireland has adopted a sound waste management strategy and are pleased to play our part in it.

8. LANDFILL OF ASH

A number of objectors have concerns about the landfill of ash from our incinerator. We have two types of ash, hazardous and non-hazardous. Our non-hazardous ash will be landfilled in Ireland in one or more of a number of existing or planned landfills in Ireland. In the absence of a hazardous waste landfill being available in Ireland we will export it to our own hazardous waste landfill in Antwerp, Flanders

9. ZERO WASTE

Zero waste as a waste policy has been proposed as an alternative strategy that Ireland should adopt. We have studied Zero waste as an alternative approach and my evidence is a result of that research.

Zero waste is a noble concept. It holds the highest position in the waste hierarchy as the elimination of waste is the ultimate target.

However it would require the redesign of all products, a dramatic chance in lifestyles, it does not solve today's waste problems and no community has achieved a zero or near zero waste position.

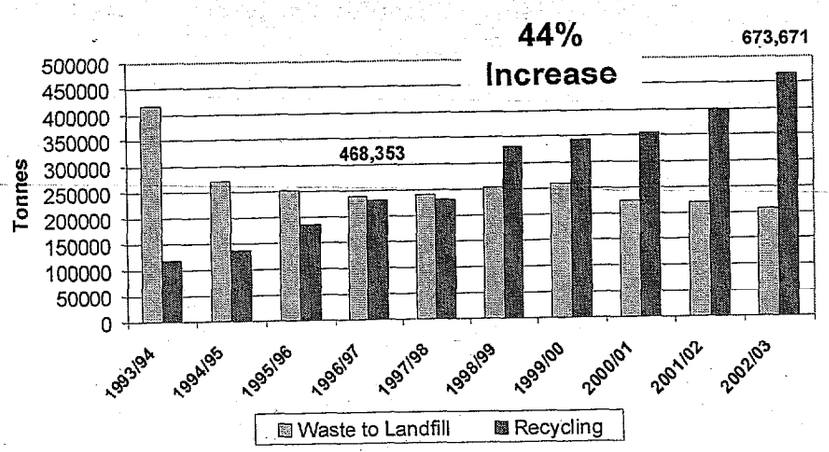
The concept of zero waste was founded in Canberra, Australia as "Zero Waste to Landfill". Opponents to incineration have dropped the "to landfill" bit and replaced it with "Zero Waste". This is unfortunate as in our opinion they have done the original concept a disservice and therefore many people will not believe in the original concept of "Zero Waste to Landfill" which may be more achievable and would be an important move towards a better environment.

We have looked at the situation in Canberra and have visited Canberra for a full week to assess their progress. We were impressed with the enthusiasm shown by the authorities in Canberra and applaud their results.

Canberra Waste Statistics

My first graph shows the waste situation in Canberra. It shows the total amount of waste landfilled and recycled since 1993. We have shown on the graph progress made since 1996 when the community launched their Zero Waste to Landfill campaign.

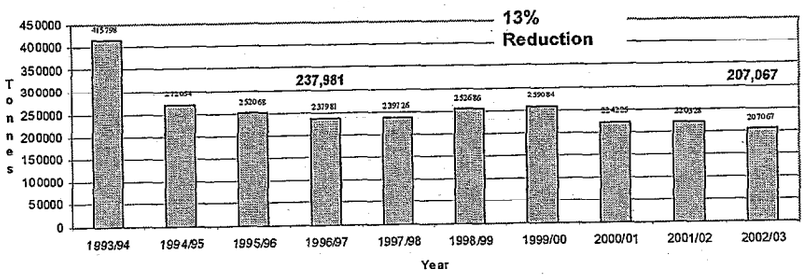
As can be seen from the figures they have reduced the amount of waste going to landfill but have not reduced the total amount of waste. In fact the total waste generated has grown by 44%.



If we look closer at their landfill figures we can see that the reduction in waste landfilled has decreased by only 13% since the start of the campaign.

Zero Waste Canberra

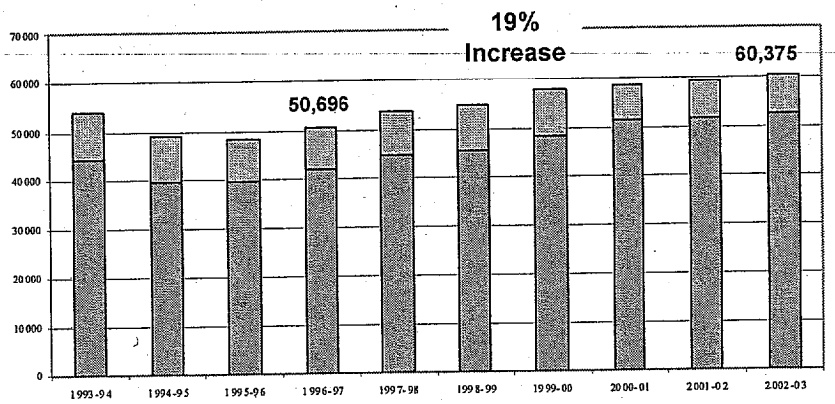
Total Waste to Landfill



An even closer look at their progress in terms of domestic waste landfilled shows that domestic waste going to landfill since 1996 has actually increased by 19%.

Zero Waste Canberra

Domestic Waste To Landfill

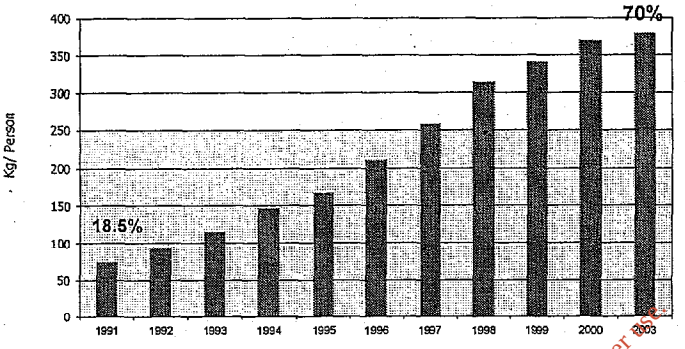


This does not mean that communities should not aim for "Zero Waste to Landfill", however it does show that even this limited target is difficult to achieve let alone the proposal to adopt "Zero Waste" as a realistic strategy. "Zero Waste" can be a target but we should be more realistic in out waste management planning.

10. IWM IN FLANDERS

Thankfully we do not have to look as far away as Australia to find best practice in the original concept of "Zero Waste to Landfill". Flanders in Belgium have achieved more than any other region in the world in achieving the target of "Zero Waste to Landfill". They have a diversion rate of 70% away from the disposal of waste, which is the highest diversion rate in the world. For clarification we would like to point out that this 70% figure does not include waste sent to incineration.

Integrated Waste Management in Flanders
Recycling Rates



Data Source: Ovam, Flemish Waste Authority, 2003.

We would also like to point out that Flanders has 1.2 million tonnes of incineration capacity which proves that recycling and incineration can exist together in a well designed and planned Integrated Waste Management system.

I would like to conclude this section by again repeating that the waste policy in Ireland is to adopt an Integrated Waste Management system where all aspects of the waste hierarchy are employed. This is the case for both hazardous and non hazardous waste. This policy, if implemented, will ensure that Ireland manages its waste in a responsible and sustainable manner.

11. Waste Regulations

Some objectors have stated that waste management in Ireland is not a regulated industry. We would like to refer you to a Legislation Guide produced by Indaver that details all of the current regulations in Ireland covering this activity. It can be seen that a lot of these regulations are relatively new with most regulations having being introduced in the last ten years. This may be why this misconception exists.

12. Static Kiln

As previously reported to the public and the EPA Indaver had an accidental release of dioxin from our static kiln incinerator in Antwerp in 2002. This was a result of a design fault in a new burner fitted to the installation. When setting up the new burner the designers set it for operation as if it was for one of our other incineration installations. This would have been successful except that this installation is for the disposal of heavily chlorinated waste including PCBs and dioxins and this process requires that the burner has a very high flame tip temperature in order to thermally crack the chlorinated molecules. As this was not done the gas cleaning system was overwhelmed with dioxins as we were pumping dioxins into the kiln and not destroying them.

This resulted in a release of dioxin far above our licence limit. As all other indicators were signalling that the kiln was operating correctly it was a number of weeks before this error was detected.

Testing of the local environment showed that no measurable environmental impact was detectable. The kiln was corrected and was put back into service a number of months later and is today operating below 90% of its licence limit.

This situation could not arise in our Ringaskiddy because the technology is not the same and more importantly we do not plan to deal with this type of waste in Ireland.

13. Company Competency

We have been operating in the waste management industry in Ireland since 1977 with a very good track record. I will demonstrate in my evidence the people and structures within the company that will show that we have the competence to operate the Ringaskiddy facility.

14. Existing Activities

Indaver's main customers are from the pharmaceutical, chemical and electronics sector.

Since 1999 the company has operated a waste transfer station in Dublin Port for the storage of hazardous waste prior to shipment for recovery or disposal. In 2004 the facility handled over 20,000 tonnes of waste. Over 25 of the employees are located here. They include graduates of chemical engineering / physics & chemistry / environmental science and are involved in the classification / packaging / preparation of paperwork required for shipment of waste.

The company has an office in Cork which employs approx 20 people – which includes graduates of chemical engineering / physics & chemistry / environmental science who are involved in the classification / preparation of paperwork required for shipment of waste.

Indaver ships waste under the trans-frontier shipment regulations, or other EU legislation where appropriate, which ensures compliance and traceability

15. On-site Services

Indaver also services customers at their sites. Employees go on-site to package waste and supervise the preparation of loads of waste for transport. The company also provides an emergency response service for containment of spills / cross-pumping of liquid wastes to appropriate packaging.

16. Special Waste

Indaver Ireland and Rehab Recycle are partners in the recycling of Waste Electrical and Electronic equipment. Indaver offers expertise in the arrangement of the packaging / collection of waste and the provision of outlets for the hazardous / recyclable material. Collected material is brought to Rehab Recycle facilities where it is sorted / dismantled / repacked for disposal / recovery.

17. Recycling

The company operates a recycling collection services for unwanted paper / magazines in Leinster and Munster. Collected material is transported to warehouses in Dublin and cork where it is stored prior to export to paper mills for recycling. Indaver collected and sent for recycling over 6,000 tonnes of paper in 2004.

The company also operates four recycling centres on behalf of Meath and Limerick County Councils.

18. COMMERCIAL

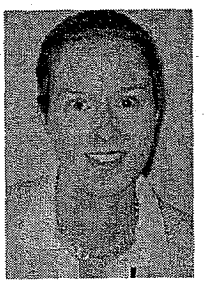
The people who will source the waste for the facility are the Commercial Team. John Johnston who has been with the company since 1997 leads this Team. John has a Degree in Chemical Engineering. A number of others members of John's Team also have third level qualifications.

The Commercial Teams responsibility is to identify waste streams from waste producers that are suitable for the Ringaskiddy facility. The Commercial Team have been doing this work since the company was founded. The only difference in the future will be that the incinerator they are sourcing waste for will be in Ireland rather than in England, Belgium, Holland or Germany. This will make their work easier rather than harder.

19. COMPLIANCE & TECHNICAL

Once the waste streams have been sourced the waste must be profiled and classified. This is done by our Technical Team who again hold a number of relevant third level qualifications.

Patricia McGrath, the company's Compliance Manager leads this Team. Patricia is also a Chemical Engineer and has been with the company since 1999.



Technical Team

QESH Team

Again this Team have been doing this work since the company began operations. They are currently profiling and classifying waste for facilities abroad and therefore their work will become easier once the Ringaskiddy facility becomes operational.

This Team will also be responsible for sampling of waste at our proposed facility. This will be done using our on site laboratory. The Team will be responsible for the operation of a similar laboratory in our Dublin hazardous waste transfer station in Dublin.

Patricia has responsibility for QESH activities. QESH stands for Quality, Environment, Safety and Health. The company has a full time Safety Officer and five company safety representatives.

Patricia will also be responsible for auditing our compliance with our waste licence for Ringaskiddy. Patricia is already responsible for the auditing of our Transfer Station waste licence and numerous waste permits throughout Ireland. Many of the system in our draft licence are similar to existing reporting requirements in our existing licence.

20. SITE SERVICES & ENGINEERING

Frequently company personnel are requested by customers to pack and load the waste on customer's sites. Our Site Services Team carry out this work. Conor Jones who also has a Chemical Engineering Degree has been with the company since 1999 leads this Team.

The work this Team currently carried out by this Team will be directly related to waste handling in Ringaskiddy. Where waste will be unloaded from trucks and tankers, cross-pumped from drums into tanks and solid waste will be unloaded from intermediate bulk containers.

Conor has worked on the Ringaskiddy project since we began preparing our EIS and Waste Licence. Conor has also work on our Dublin Hazardous Waste Transfer Station and has prepared the planning, licensing and EIS package for out blending plant in Dublin. Conor will be responsible for the construction of our blending plant later this year in Dublin.

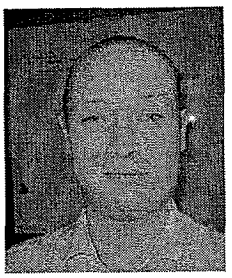
21. LOGISTICS

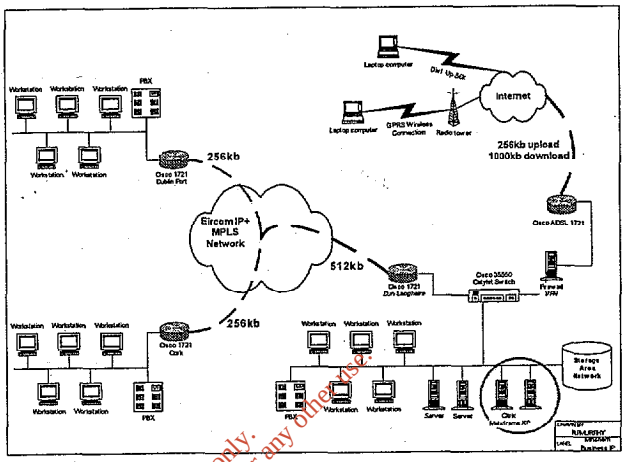
Once the waste has been profiled, classified, packed and loaded the waste is then collected. This is done by our Logistics Team, which is led by Thomas Millar our Logistics Manager. Again there are a number of people in this Team with third level qualifications.

As this Team is currently shipping waste to England, Belgium, Holland and Germany their work will be much simplified by the opening of the Ringaskiddy facility.

22. INFORMATION TECHNOLOGY

Information technology, both hardware and software plays an important role in the management of our company, We have a very sophisticated system to control the movement of waste and all Indaver facilities in Ireland are connected to one network. This allows us to seamlessly manage waste shipments into and out of our facilities. Rory Murphy who is a Mechanical Engineer manages out IT system.





We have developed our own waste tracking software to manage waste shipments called "Tracker". The Indaver Group in a number of other countries has adopted this system, which we developed in Ireland. This system will be used to track waste into and out of our Ringaskiddy facility.

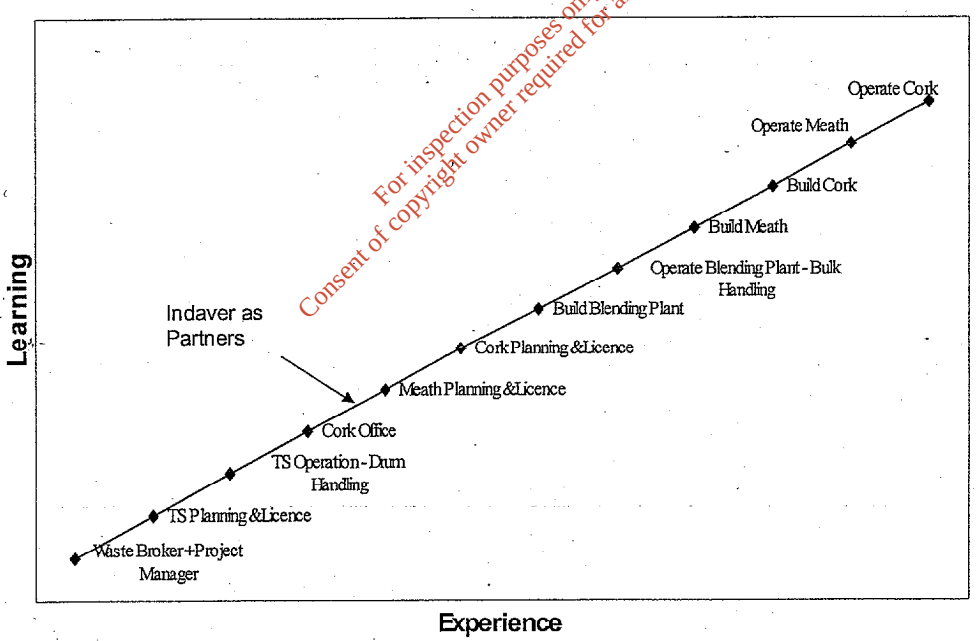
23. Project Team

We have a very experience Project Team working on the planning, licensing, legal and Seveso aspects of our project. All of them have relevant professional qualifications and have successfully obtained planning permission, Seveso, approval and draft licences for two incineration plant and a hazardous waste blending plant.

24. SYSTEMATIC DEVELOPMENT

The activities of the company have developed in an incremental and well-structured manner. The Board of Indaver Ireland Limited set out a development plan in 1995 when I joined the company and we have been working to this plan since then. The plan is to change the company from being a waste broker to being a waste infrastructure provider within Ireland. This was seen as an essential development for the company as we could see a number of years ago that Ireland could not continue to rely on other countries to accept our waste for disposal.

The graph below shows a summary of the development. of the company that is relevant to our proposed Ringaskiddy facility. We call this our "Competency Graph"



The graph shows the developments that have taken place within the company since 1995.

Our first project was to obtain planning permission and a waste licence for our Transfer Station in Dublin Port. We then began operating the facility and developed stock control and tracking systems for packaged waste as well as drum handling skills.

The opening of our Transfer Station and our Cork office meant we had to completely revise our IT network so that we could function from multiple locations. Today we have IT connections to over six locations in Ireland.

We understood that the next phase of our development could not be undertaken alone so we conducted a search of Europe for a strong financial and technical partner. This search resulted in the acquisition of our company by Indaver NV.

This partnership allows us to prepare a planning and licensing package for our Meath Project, which was soon followed by a package for Cork.

Simultaneously with these developments we have obtained planning permission and have prepared a licence review for our Blending Plant in Dublin. This will be constructed later this year and will give us experience of managing a laboratory and Tank Farm. Our Blending Plant will be an Upper Tier Seveso site, which will also be very relevant experience.

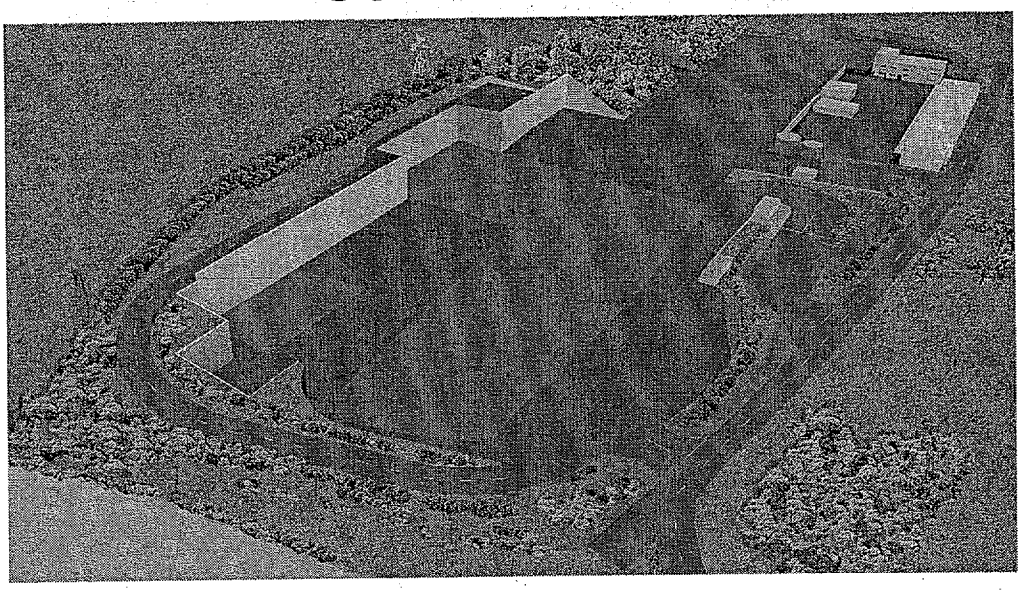
Construction should begin early next year of our Meath facility followed by our proposed Ringaskiddy facility. Our Meath plant should go into operation in 2008 followed by our Cork Plant. This will complete the transformation of our company from being a waste broker in 1995 to a fully functioning infrastructure provider in 2010.

25. DETAILED DESIGN & CONSTRUCTION

Construction of the Ringaskiddy will be in two stages. The first stage of the development will the construction of the site civil infrastructure. This will be a contract managed from Ireland with the assistance of a civil engineering consultancy.

They will work with our Team to select a Civil Contractor to prepare the site, install drainage, foundations, roads and hard standing, retaining walls, transfer station, offices and landscaping as shown in the slide below.

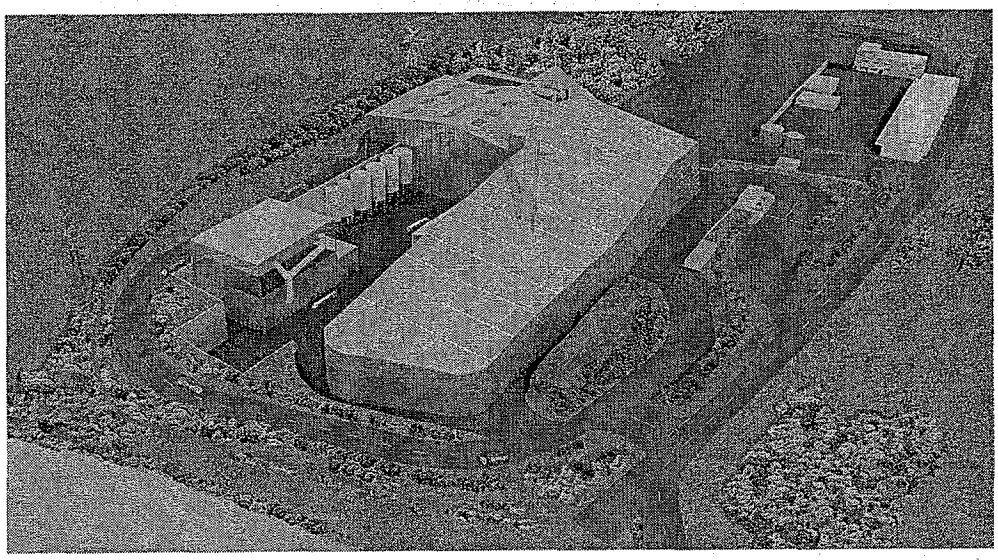
Construction I



A specialist Turn Key contractor will also be appointed for the construction of the incineration plant to a performance specification laid down by Indaver. These international contractors construct incineration plans all over the globe and have been used successfully by Indaver for the construction of all of its existing facilities.

These contractors deliver a fully functioning plant to their clients and are also responsible for the training of managers and operators. They continue working on site for up to twelve months after construction is completed. This training coupled with our own experience of managing waste in Ireland and Indaver's international experience will ensure that the plant will be operated safely after construction.

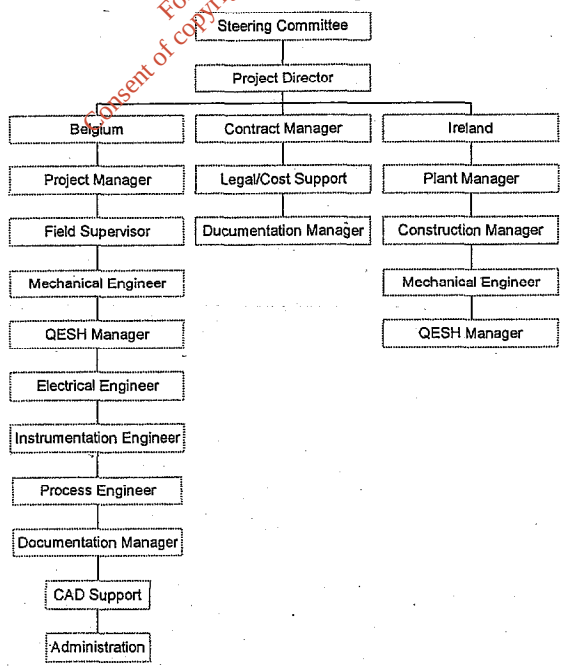
Construction II



26. DESIGN & CONSTRUCTION TEAM

We will have a Design and Construction Team in place later this year for the construction of our Meath facility. This Team will be based in Belgium and Ireland as shown below.

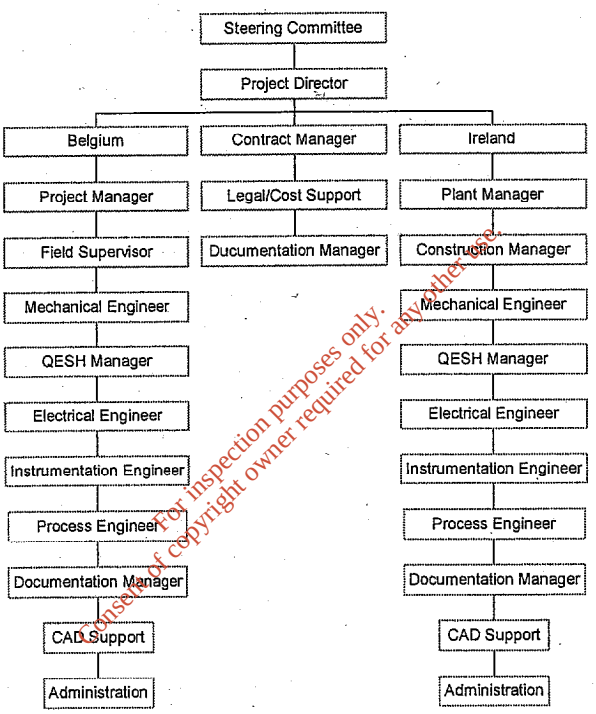
Detailed Design Stage



The Belgian members of this Team are already in place and have experience of this type of work. Their most recent work has been the detailed design of our 466,000 tonne fluidised bed plant in Belgium. The detailed design will include a performance specification from the company along with any planning, Seveso. legal or licensing conditions attached to the project.

Once detailed design is concluded the Irish Team will be strengthened to prepare for construction. The Irish Team will be a copy of the Belgian Team and a transfer of experience will begin from the Belgian Team and Turn Key Contractor so that the Irish Team will be trained to be responsible for the operation of the facility once construction is completed.

Construction Stage

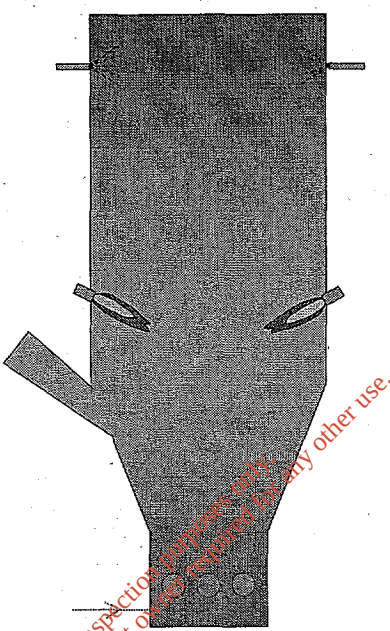


27. Fluidised BED INCINERATOR

A number of objectors to our licence have concerns about our lack of experience with the technology chosen for Ringaskiddy. This should not be a concern because as shown above the equipment supplier will provide training in the plants operation. In addition the company will have experience of running a 466,000 tonnes fluidised plant for a number of years prior to the operation of our Cork facility.

Fluidised Bed Incinerator

Indaver are currently constructing a 466,000 tonnes per annum fluidised bed incinerator in Belgium, which will become operational in early 2006



We have chosen a Fluidised Bed because it is envisaged that this part of the facility will primarily deal with wastewater treatment sludge that cannot be recovered by other means. Fluidised Bed technology is considered Best Available Technology (BAT) for the treatment of sludge. This is the principal reason why we have chosen this technology for this part of the facility. A similar facility has been treating sludge in Belfast for a number of years.

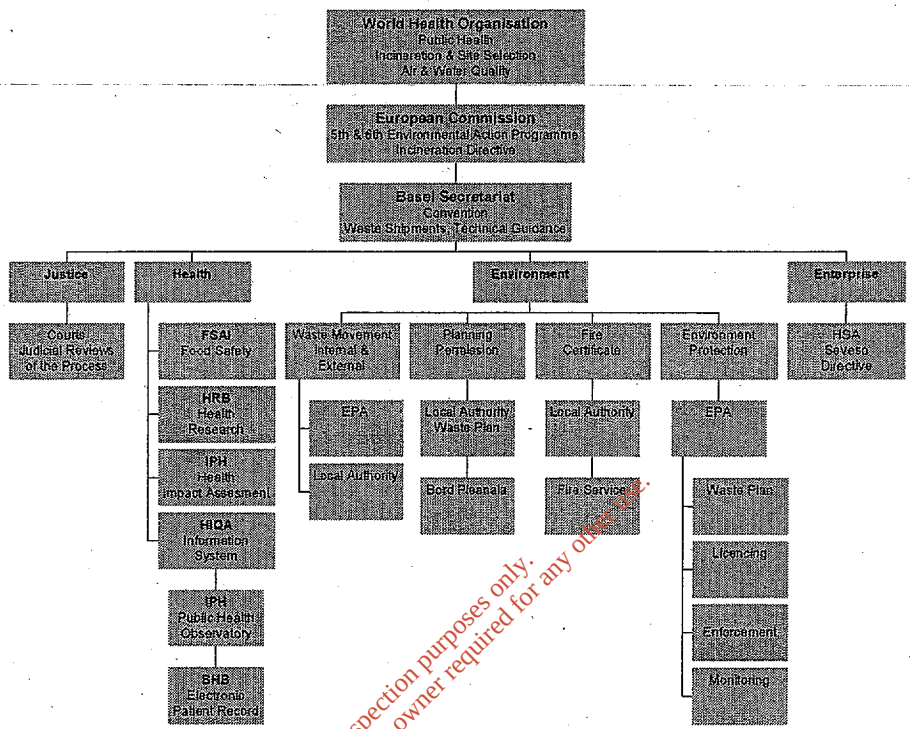
28. Gas Line

There is a gas line running around the perimeter of our site. This line will have to be moved slightly to accommodate construction of the facility and will be used to provide gas for the backup heating system in the incinerators. It has no implications for the Seveso classification of our site. It is interesting to note that if was not there at present we would have to install it.

29. HEALTH SYSTEMS

My evidence also concerns the systems in place to protect public health on all aspects of an incinerator.

The slide shown gives a non-exhaustive summary of all the health systems in place in relation to the incinerator.



30. WORLD HEALTH ORGANISATION

The World Health Organisation has studied incineration and has produced guidance for local authorities and governments when considering utilising incineration as part of an integrated waste management system. This document is entitled "Waste Incineration Pamphlet No. 6" and is available from the World Health Organisation Regional Office for Europe. It states that properly managed modern incineration plants do not pose any threat to human health.

Some objectors have claimed that this pamphlet is out of date and does not reflect current World Health Organisation thinking on incineration. This pamphlet can be found on the World Health Organisation's web site. In addition the World Health Organisation has confirmed to Indaver via e-mail, that this pamphlet represents current World Health Organisation thinking on incineration and that there are no planned updates as it is still relevant.

In addition the World Health Organisation has produced guidance on the site selection process that should be followed when selecting a site for a hazardous waste facility.

31. THE EUROPEAN COMMISSION

The European Commission through the 5th and 6th Environmental Action Programmes have studied incineration and recognise it as a necessary part of modern waste management systems. In order to protect human health, they have introduced Directive No. 2000/76/EC in the year 2000, laying down rules for the safe operation of incineration plants. The Directive states that:

"*Therefore a high level of environmental protection and human health protection requires the setting and maintaining of stringent operational conditions, technical requirements and emission limit values for plants incinerating or co-incinerating waste within the Community. The limit values set should prevent or limit as far as practicable, negative effects on the environment and the resulting risk to human health.*"

The Irish Government have adopted the incineration directive into Irish law under SI 275 of 2003. The EPA in issuing its draft licence for our Ringaskiddy facility would appear to have followed this incineration directive.

The Commission is satisfied that if the Incineration Directive is followed that human health is protected.

32. BASEL SECRETARIAT

The Basel Secretariat was founded in the 1980s to protect public health and the environment from illegal and improper movements of hazardous waste around the globe. Ireland is a signatory to the Basel Convention and it has been brought into Irish law under SI 149 of 1998. The signing by Ireland of this convention means that the movement of hazardous waste into and out of the country is a controlled activity. The local authorities in Ireland are responsible for the movement of hazardous waste out of the country and the EPA are responsible for the movement of hazardous waste into the country.

The Basel Secretariat, which is supported by the United Nations Environmental Programme (UNEP) also produces guidance to assist countries in setting up hazardous waste management systems including incinerators in order to protect human health.

33. THE DEPARTMENT OF THE ENVIRONMENT

There are a number of Irish Government departments that have responsibility for the protection of public health relating to incineration. The Department of the Environment has issued policy documents setting out government policy on waste management in Ireland. The first of these documents was "Waste Management – Changing our Ways" which was issued in 1988. This policy document adopted the Waste Hierarchy as the proper system to follow within Ireland. This was reinforced in 2002 in an updated policy document entitled "Preventing and Recycling Waste – Delivery Change".

Waste Licence

The Irish Government set up the Environmental Protection Agency to improve Ireland's environmental performance in order to protect the environment and public health. In addition the Irish Government introduced legislation requiring the EPA to prepare a National Hazardous Waste Management Plan for the protection of the environment and public health in relation to the proper management of the country's hazardous waste.

The EPA is responsible for a number of functions that impact on our incineration facility. The first of those is the issuing of licences. The second is the enforcement of that licence and the third is the overall monitoring of Ireland's environment to ensure that our environment is improving and not deteriorating. All three of these directly protect the environment and public health.

Planning Permission

In order to construct an incineration plant in Ireland, a company must obtain planning permission from An Bord Pleanala. As part of this process, An Bord Pleanala must consider environmental protection and public health during the construction period and must seek advice from the Health and Safety Authority (HSA) to be convinced that human health is protected in the event of major accidents.

Fire Certificate

A company proposing to build an incinerator in Ireland must obtain a fire certificate for the proposed facility. This involves a detailed assessment of the facility by the fire service under the direction of the local authority to ensure that proper systems are put in place to protect public health of employees, members of the public and fire fighters.

Waste Movement

As detailed earlier, Ireland is a signatory to the Basel Convention and therefore has implemented control systems to protect public health from illegal shipments of hazardous waste, both into and out of the country.

34. THE DEPARTMENT OF HEALTH & CHILDREN

The Department of Health has a very important part to play in the protection of public health in relation to an incinerator. Under the Department of Health, there are a number of state agencies responsible for the protection of public health.

The Food Safety Authority of Ireland

The Food Safety Authority of Ireland (FSAI) produced a Report in October 2003 entitled "Report on Waste Incineration and Possible Contamination of the Food Supply with Dioxins". This report found that:

"*In relation to the introduction of waste incineration in Ireland, as part of a national waste management strategy, the FSAI considers that such incineration facilities, if properly managed, will not contribute to dioxin levels in the food supply to any significant extent and will not affect food quality or safety.*"

The Health Research Board

The Health Research Board (HRB) commissioned a study at the request of the Department of the Environment and Local Government. The aims of the report were to inform policy makers of:

- The technical aspects of both landfill and incineration practices in Ireland
- The adverse effects that these practices may have on the environment and human health

Although waste management strategies are not addressed in this report, the authors acknowledge that an integrated systems approach is required if effective waste management is to be accomplished at both local and national levels. This approach should reflect the waste management hierarchy of prevention, substitution, reuse and recycling, and energy recovery with environmentally secure disposal of any residual waste.

The HRB report was a general report that looked at landfill and incineration. It did not comment at any particular project in detail. We have assessed the report in terms of our own project and would like to present evidence to that effect.

The HRB report stated that Ireland should proceed with the introduction of incineration as part of an Integrated Waste Management strategy, but it did also recommend research and development needs.

Risk Assessment

The Department of Health & Children have given responsibility for the development of expertise in Health Impact Assessments (HIA) to the Institute of Public Health (IPH). The IPH have already developed codes of good practice for the carrying out of HIAs in Ireland. In addition they have set up a training programme for people interested in Health Impact Assessments. This will ensure that in future Ireland will have adequate resources to conduct HIA's on government policies and specific projects.

The HRB report could also be considered as an HIA on Ireland's current policy of introducing incineration into Ireland. The HRB did not find any reason why Ireland should not proceed with the implementation of this policy.

Health Information Systems

The Department of Health have set up the Health Information & Quality Authority (HIQA) and one of its functions is to promote the quality of health information and ensure its relevance to strategic priorities, the HIQA will set standards by which it will assess and advise on the suitability of major developments in the area of health information and the supporting information and communications technology.

HIQA, through the HRB, are working with the Institute of Public Health to set up the Public Health Observatory (PHO). The PHO's functions will be to support the process of health surveillance in order to enable analysis by small local area, such as district electoral divisions.

A necessary part of the functions of the PHO will be the introduction of an Electronic Health Record (EHR). The EHR will collect data on the public health of each individual in Ireland.

The Southern Health Board has already started work on the introduction of the EHR within its area.

It is interesting to note that both Risk Assessments and improved Information Systems were contained in the Departments current strategy document "Quality and Fairness – A Health System for You" which was published a number of years before the HRB report. HIQA's base of operations will be in Cork.

Monitoring of Environmental Impacts

The HRB study identified the need for baseline studies around waste facilities so that changes over time to the environment could be monitored. Because our facility is an incinerator we are required to have an Environmental Impact Statement in which we are required to measure baseline environmental data such as air quality, water quality, and noise levels etc. This we have done which will ensure that any impact from our facility can be monitored in the future.

Risk Communication and Perception

Since the start of our project we have conducted a comprehensive Communication Programme. The company is aware of people's concerns regarding incineration. In order to try and allay people's fears or concerns about impact of incineration on health or the environment we have, where possible, provided information from third parties, such as the WHO, EU Commission, Department of the Environment, the EPA and the Food Safety Authority of Ireland. We have been very active and available to discuss and debate our project in all available forums.

35. THE DEPARTMENT OF ENTERPRISE

Health & Safety Authority

The, Health and Safety Authority (HSA) is responsible for the protection of public health in the event of a major accident at the plant. They have already given their opinion at the Planning Stage as detailed earlier.

They also have a role to play in the protection in the workplace of employee's health and safety.

36. THE DEPARTMENT OF JUSTICE

Judicial Reviews

If a person or body thinks that one or more parts of the attached system has not been applied in the terms of our project they are at liberty to seek a Judicial Review of the States management of that particular part or parts.