

CD Placeholder

This page denotes that a CD entitled “John Ahern’s
Presentation 167-1 OH” was submitted as part of this
Oral Hearing.

The CD is held by the EPA at

Licensing Unit,
OLG,
EPA,
P.O. Box 3000
Johnstown Castle Estate,
Wexford.

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

 **FUJIFILM**

CD-R

Hearing
John Thomas's Presentation

167-1 OH

Doc 4

For inspection purposes only
Consent of copyright owner required for distribution

ORAL HEARING INTO
PROPOSED DECISION 167 - 1
Carranstown WASTE MANAGEMENT FACILITY
PROOF OF EVIDENCE

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

John Ahern
INDAVER IRELAND

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 am going to present evidence on the following issues:

1. Waste Policy
2. Incineration in Europe
3. Zero Waste
4. Company Competency
5. Health Protection Systems

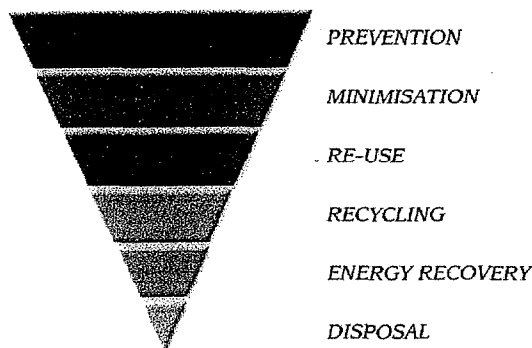
1. WASTE POLICY

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 an integrated waste strategy when managing waste. They state that member states should first try to prevent waste and if not preventable they should adopt the appropriate technology for each waste stream.

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". An Integrated Waste Management system is usually shown as the "Waste Hierarchy".

Waste Hierarchy

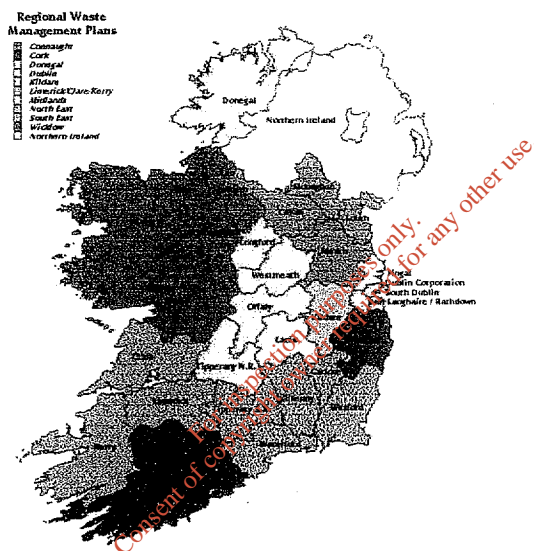


The waste hierarchy shows that preventing waste is the most important element. If waste cannot be prevented we should try to minimise its production and if it is produced we should reuse it, recycle it, recover energy from it and only as a last resort should we dispose of it.

Irish Waste Plans

Ireland ensures the waste hierarchy is implemented by preparing plans for the delivery of a waste management service. There are Regional Waste Management Plans prepared by Local Authorities for each region in Ireland. Our Carranstown waste management facility is in line with the North east Waste Management Plan.

Irish Waste Plans Implementation of the Hierarchy



The NEWMP plans the implementation of an Integrated Waste Management system in the North East.

IWM in the Home

Waste awareness and public participation are key elements 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 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".

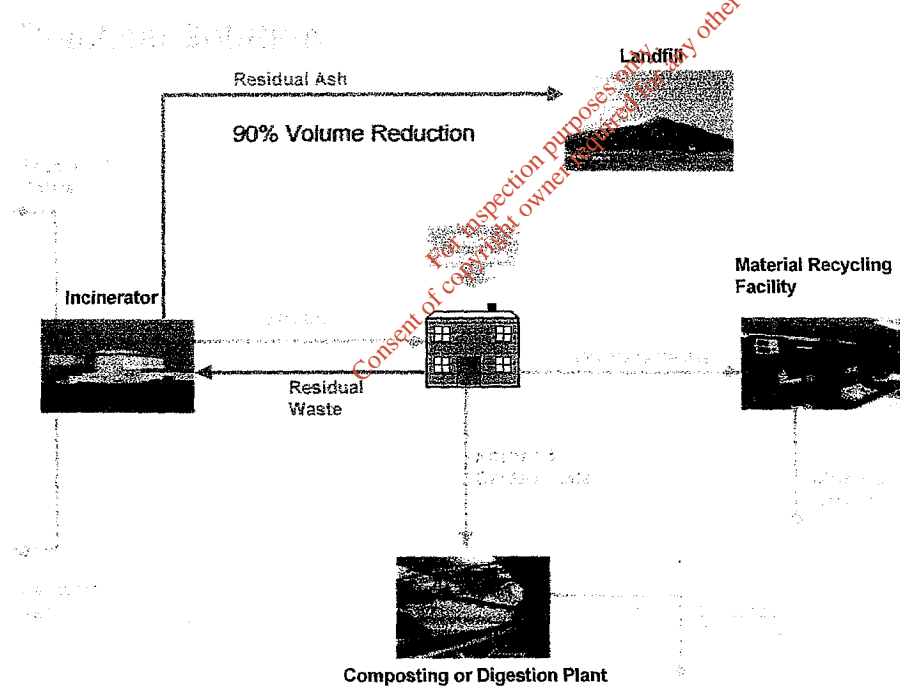
Segregation of waste is the key to this system. If waste is not mixed in the first instance it is possible to recover more resources from it. The first part of the system to manage waste if it cannot be avoided deals with a waste stream called "dry recyclables". These

types of waste such as paper, glass, wood and metal are easily dealt with. They can either be brought to a Civic Amenity site such as the sites in Navan, Trim or Dundalk for onward shipment for recycling. Or alternatively they can be separately collected from peoples homes.

The second stream, which consists of organic wastes, can either be composted in the home or separately collected for treatment in either compost plants or digestion plants. A compost plant produces compost for use in horticulture or agriculture. A digestion plant produces methane, which can be used as a fuel and the digestate can be used in agriculture.

These two streams alone can account for between 50 and 70% of the municipal waste produced in the North East.

The third stream called residual waste consists of waste that cannot be recycled or has not been separately collected. This stream is high in energy content and should be sent to an incinerator with energy recovery where it can be used to produce electricity. In addition metals and ash can be recovered from the waste streams. Finally the residual ash from an incinerator should be landfilled. The volume of ash that is landfilled is reduced by over 90% and the mass is reduced by over 70%.



Landfill Directive

As Ireland is currently over dependant on landfill, our waste management problems will get worse in 2006 as the EU's Landfill Directive 99/31/EC takes full effect. This will severely restrict the amount of biodegradable waste going to landfill. Many countries in Europe have prepared for this directive by constructing biological and thermal treatment plants.

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

Benefits of an Incinerator

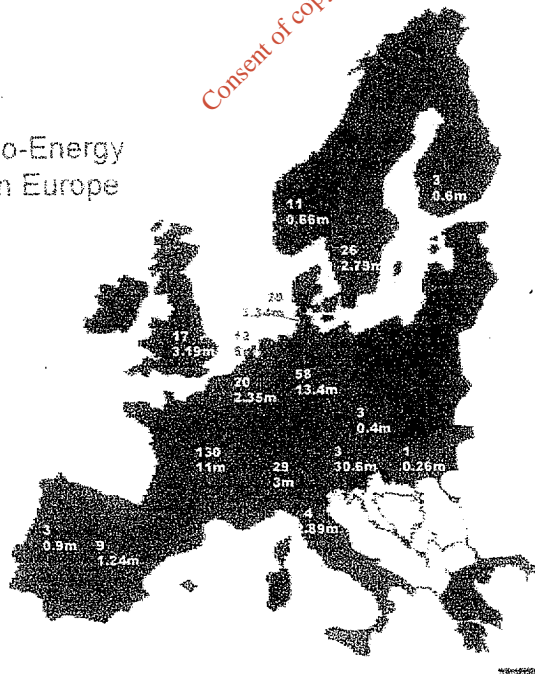
An incinerator does a number of things in an IWM system

- 1 Reduces the volume of residual waste
- 2 Produces electricity
- 3 Recovers metals
- 4 Recovers ash / aggregate

2. 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.

Waste-to-Energy Plants in Europe



For example;

Country	No of Plants	Total Capacity million tonnes / annum
Germany	58	13
Switzerland	29	3
Norway	26	2.79
Sweden	11	0.66
Spain	9	1.24
Portugal	3	0.9
Britain	17	3.19

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 Bevern.

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.

3. 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 change in lifestyles, it does not solve today's waste problems and no community has achieved a zero or near zero waste position.

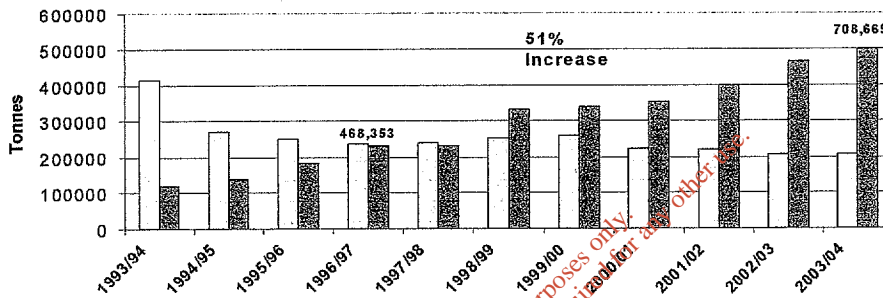
The concept of zero waste was founded in Canberra, Australia as "Zero Waste to Landfill". Opponents to our project have dropped the "to landfill" bit and replaced it with "Zero Waste". This is unfortunate as in our opinion they have done the original concept a disservice and therefore many people will 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 to assess their progress. We were impressed with the enthusiasm shown by the authorities in Canberra and applaud their results.

Canberra Waste Statistics

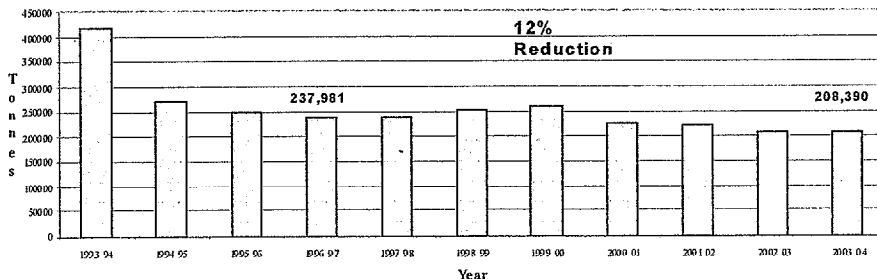
My first graph shows the waste situation in Canberra. It shows the total amount of waste landfilled and recycled since 1993. We have shown on the graph progress made since 1996 when the community launched their Zero Waste to Landfill campaign.

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 51%.

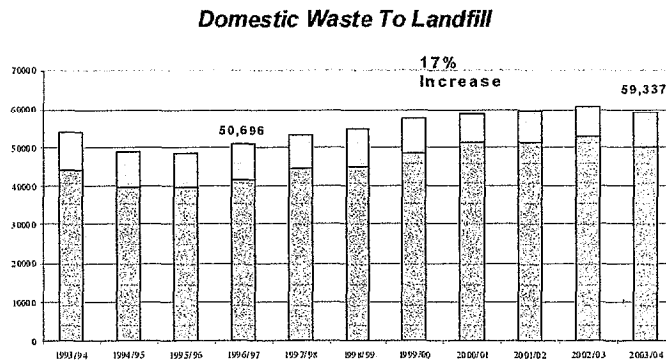


If we look closer at their landfill figures we can see that the reduction in waste landfilled has decreased by only 12% since the start of the campaign.

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 17%.

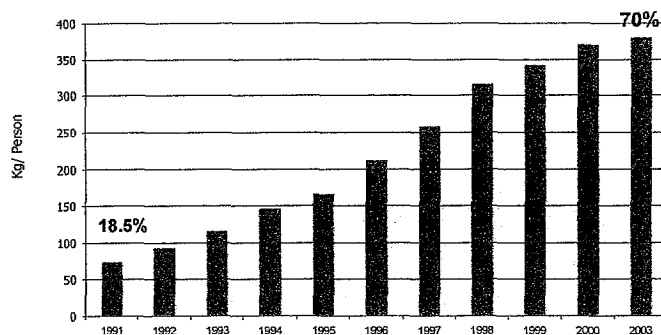


This does not mean that communities should not aim for “Zero Waste to Landfill”, however it does show that even this limited target is difficult to achieve let alone the proposal to adopt “Zero Waste” as a realistic strategy. “Zero Waste” can be a target but we should be more realistic in our waste management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

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



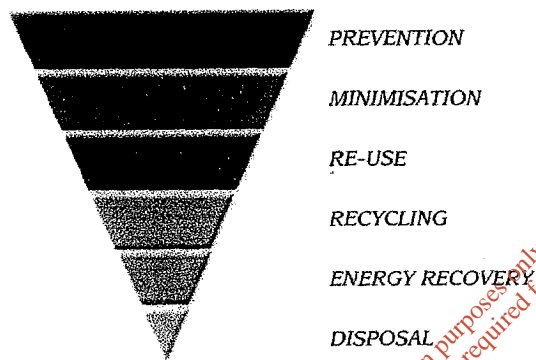
Flanders has over 1,2 million tonnes of incineration capacity

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 policy, if implemented, will ensure that Ireland manages its waste in a responsible and sustainable manner.

Waste Hierarchy



4. COMPANY COMPETENCY

We have been operating in the waste management industry in Ireland since 1977 with a very good track record. In 1999 Indaver NV acquired a 60% shareholding in the Irish company and acquired the balance in 2003.

Belgian Activities

Indaver operate the following facilities in Belgium

- Hazardous Waste Incinerators
- Non-hazardous Waste Incinerators
- Ash Recovery Plant
- Hazardous & Non-Hazardous Landfills
- Composting Plants
- Recycling Plants
- Education Centres

Irish Activities

Indaver's main customers in Ireland 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. 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. In total the company already employs 80 people in Ireland.

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

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.

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

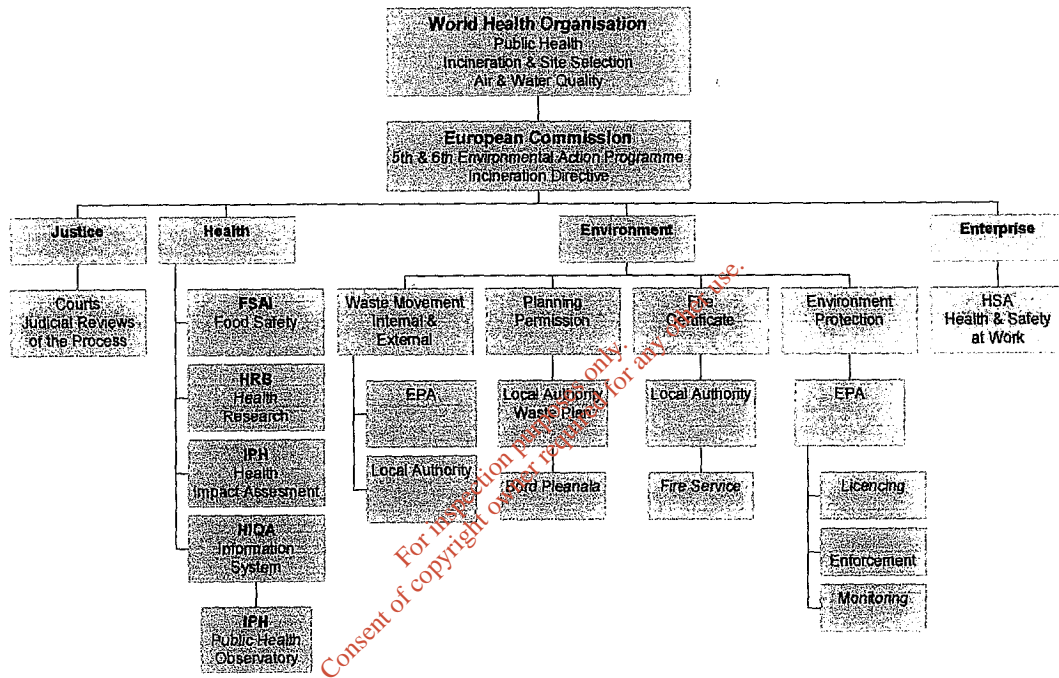
Project Team

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

5. 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.



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.

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 Carranstown 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.

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".

Local Authority / ABP

In order to construct an incineration plant in Ireland, a company must obtain planning permission from a local Authority or An Bord Pleanála. As part of this process, they must consider environmental protection and public health during the construction period.

Environment Protection Agency

The Irish Government set up the Environmental Protection Agency to improve Ireland's environmental performance in order to protect the environment and public health.

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.

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

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

THE DEPARTMENT OF HEALTH AND CHILDREN

The Department of Health & Children has a very important part to play in the protection of public health in relation to an incinerator. Under the Department of Health & Children, 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:

- 1 The technical aspects of both landfill and incineration practices in Ireland
- 2 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 HIAs on Government policies and specific projects.

The HRB report was a Health Impact Assessment 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 and Children 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). 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 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.

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. Both of these aspects of health protection are also contained in European Health Policy.

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.

In addition the EPA monitors the state of the Irish Environment on a regular basis. They monitor many aspects of the environment including:

- Air Quality
- Water Quality
- Heritage & Biodiversity
- Waste
- Climate Change
- Natural Resources

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.

THE DEPARTMENT OF ENTERPRISE

Health & Safety Authority

The Health & Safety Authority also have a role to play in the protection in the workplace of employee's health and safety.

THE DEPARTMENT OF JUSTICE

Judicial Reviews

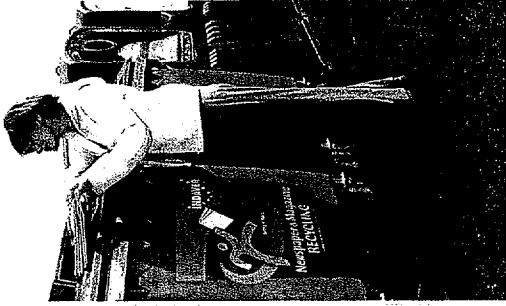
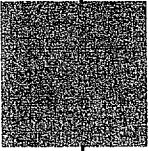
If a person or body thinks that one or more parts of the attached system has not been applied in the terms of our project they are at liberty to seek a Judicial Review of the States management of that particular part or parts.

6. CONCLUSION

In conclusion we have seen that:

1. Ireland has adopted an Integrated Waste Management Policy including all aspects of the Waste Hierarchy
2. Incineration is growing in Europe
3. Zero Waste will not solve our waste problems
4. The company has the competency to operate our proposed facility
5. Public Health is protected and the recommendations of the HRB report are being taken into account and acted on.

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



Carranstown Waste Management Facility



Waste Policy in Ireland

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



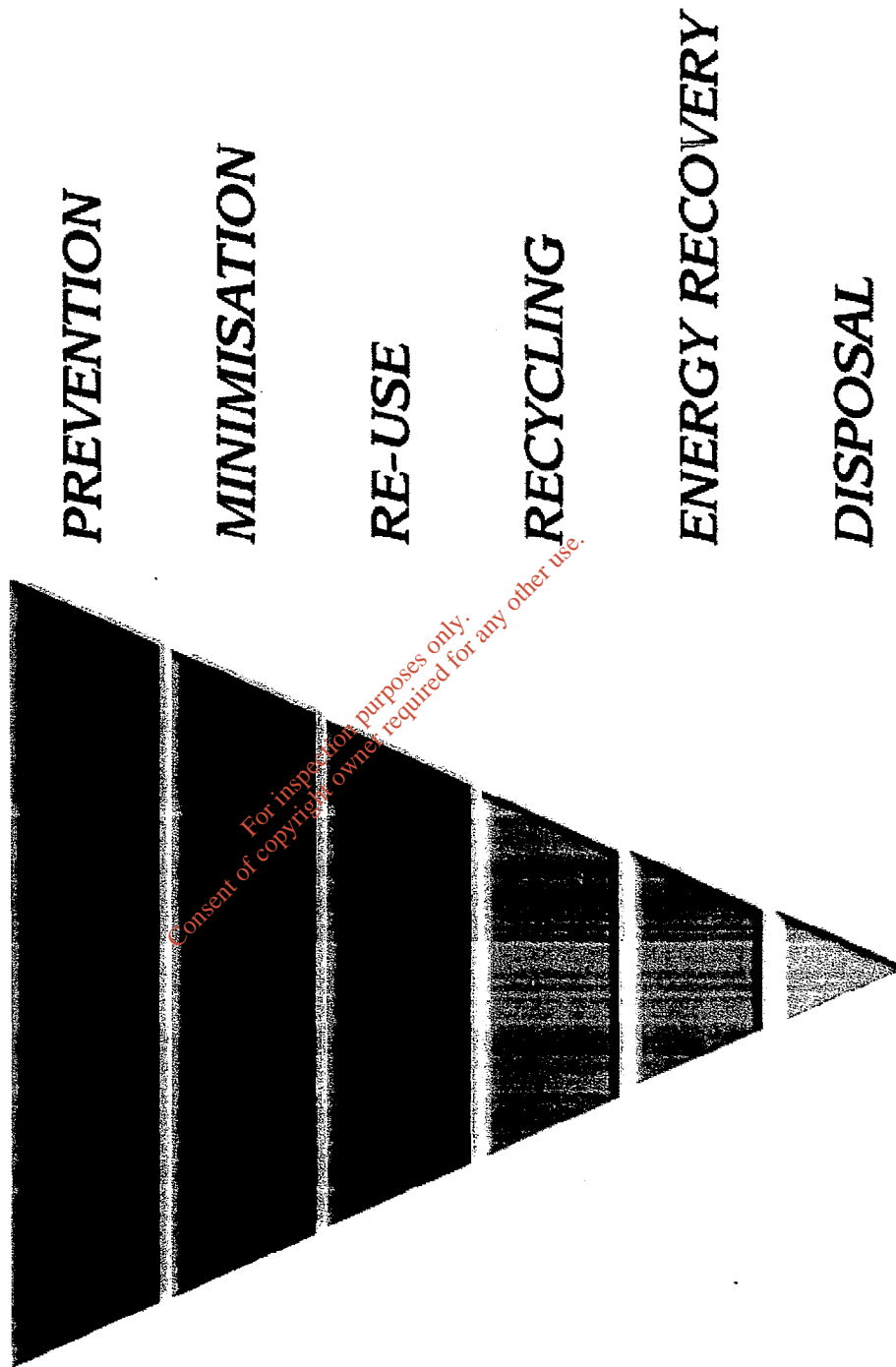
European Commission
5th & 6th Environmental
Action Programme

Irish Government
“Changing Our Ways”
“Preventing & Recycling Waste
Delivering Change”

Integrated Waste
Management



Waste Hierarchy

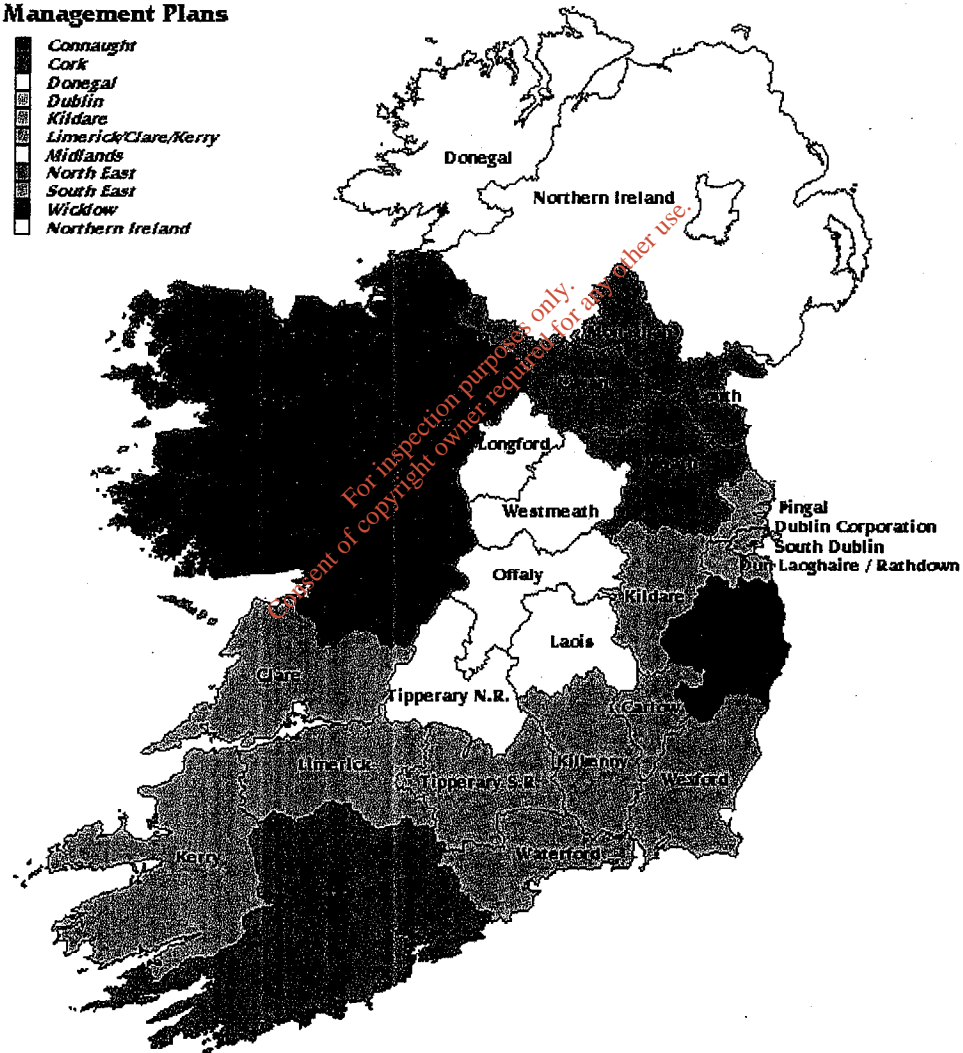


Irish Waste Plans

Implementation of the Hierarchy

Regional Waste Management Plans

- *Connaught*
- *Cork*
- *Donegal*
- *Dublin*
- *Kildare*
- *Limerick/Clare/Kerry*
- *Midlands*
- *North East*
- *South East*
- *Wicklow*
- *Northern Ireland*



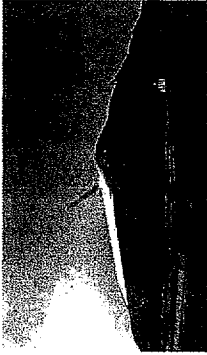
Integrated Waste Management

**In the
Home**

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



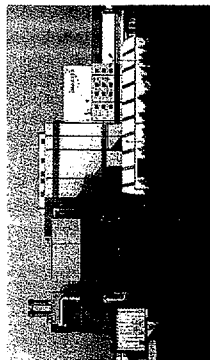
Landfill



Material Recycling Facility



Incinerator

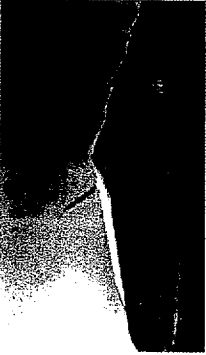


For inspection purposes only.
Consent of copyright owner required for any other use.

Composting or Digestion Plant

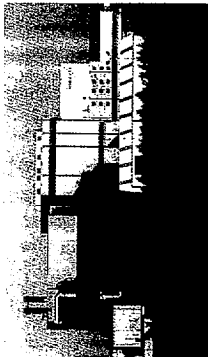


Landfill



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

Incinerator



Material Recycling Facility



Composting or Digestion Plant



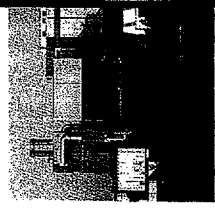
Landfill



Recycling



Incineration



Composting or Digestion Plant

Landfill

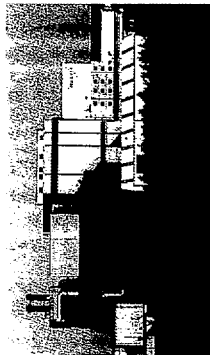


Waste Education



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

Incinerator



Material Recycling Facility



Dry Recyclables

Materials for Recovery



Composting or Digestion Plant

Landfill



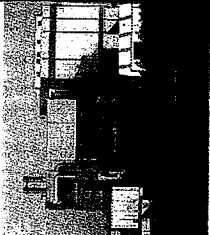
Recycling



Materials for Recovery



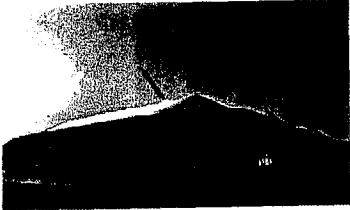
Incinerat



Composting or Digestion Plant

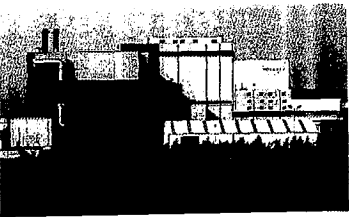


Landfill

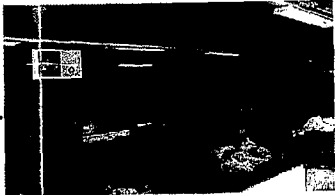


Solution for 50 - 70% of Household Waste!

Incinerator



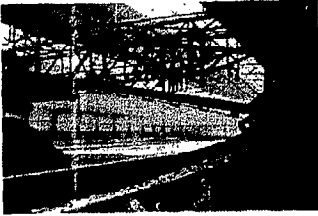
Material Recycling Facility



Recyclables

Materials for Recovery

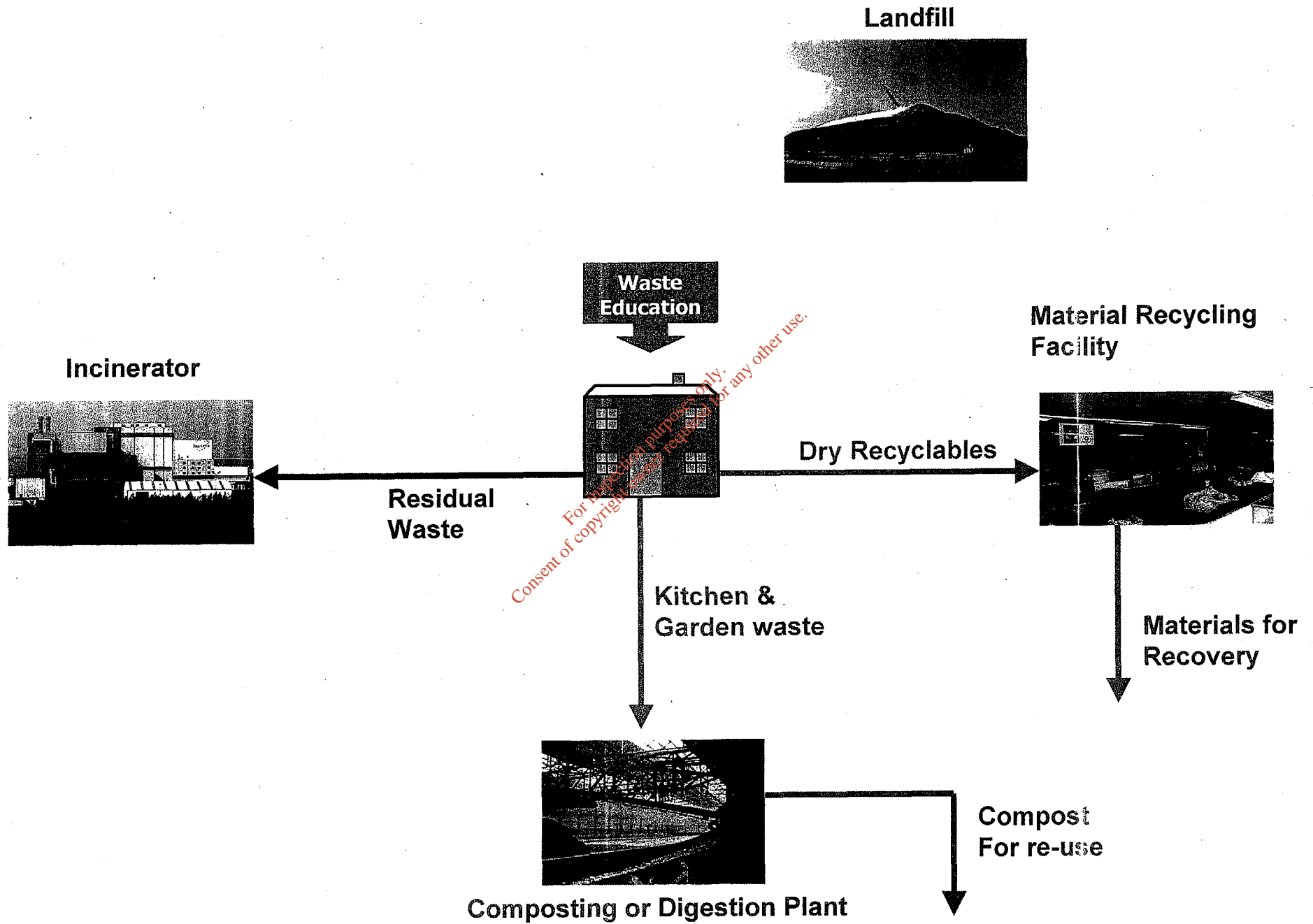
Waste

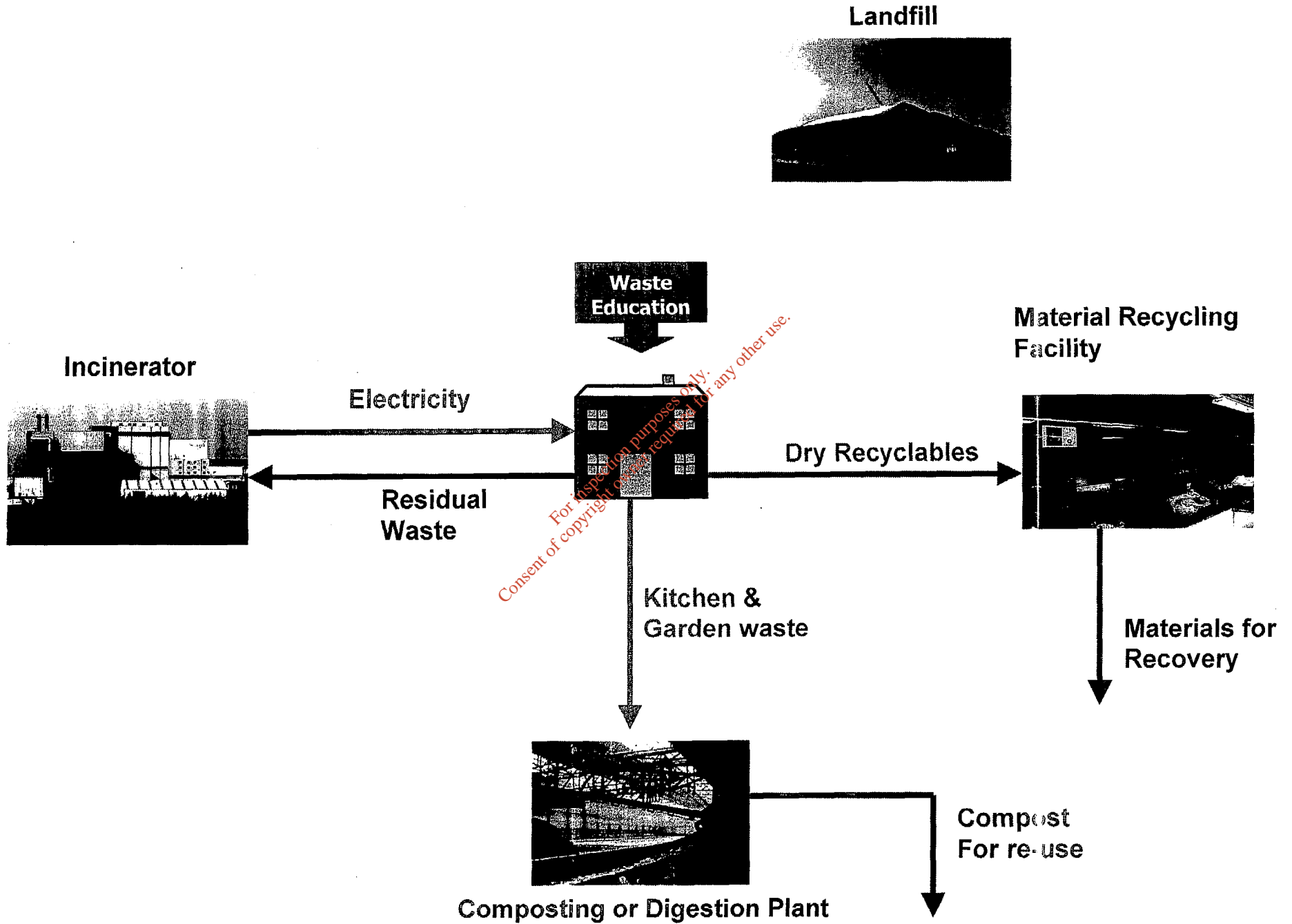


Compost For re-use

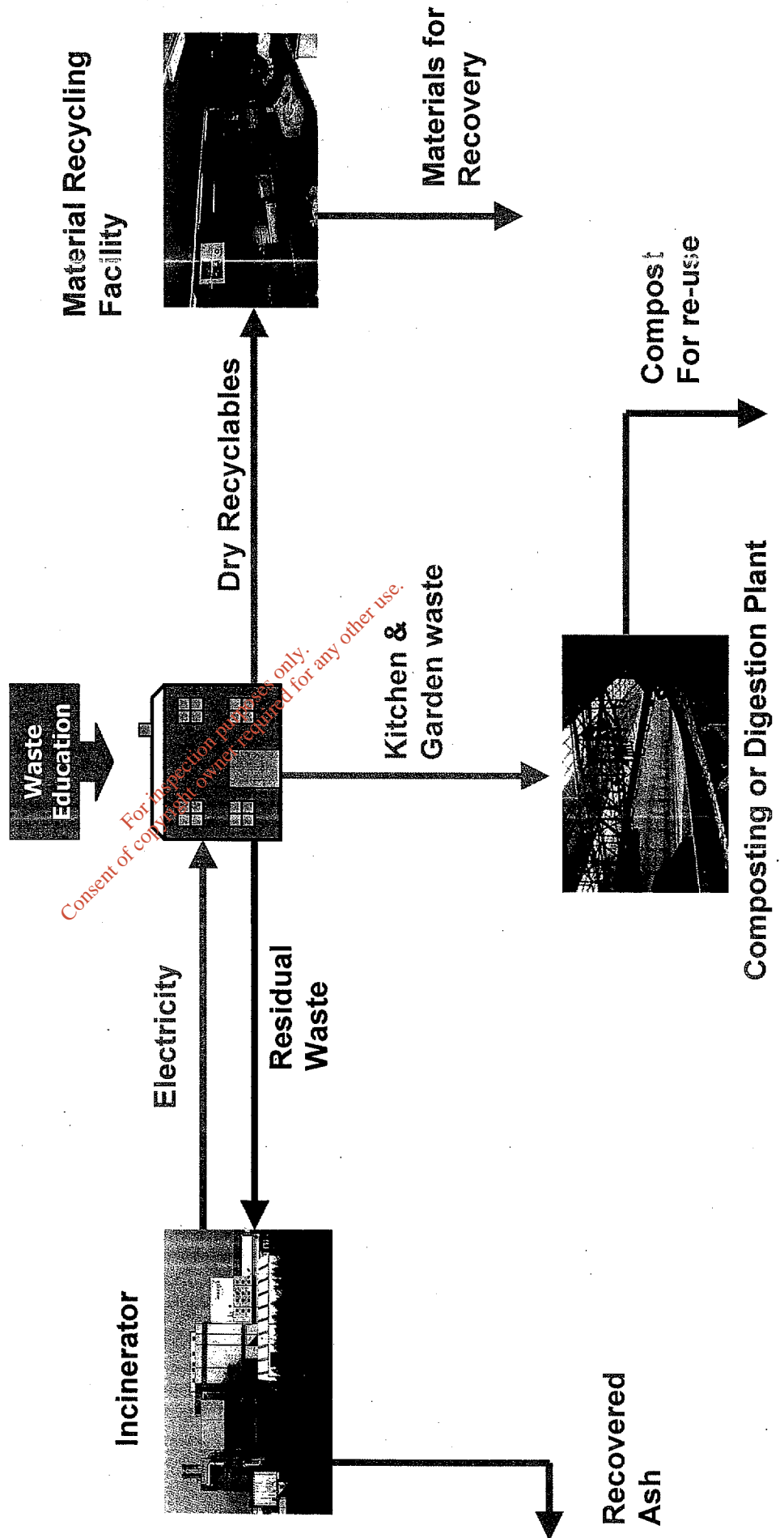
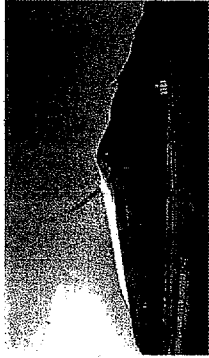
Composting or Digestion Plant

Consent to publish for purposes only. Copyright and other rights reserved. Required for any other use.



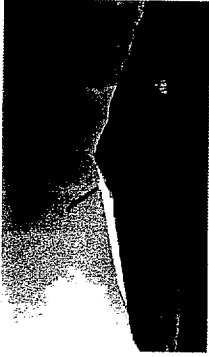


Landfill



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

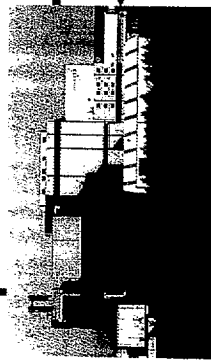
Landfill



Recovered Metals



Incinerator



Residual Waste

Dry Recyclables

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

Waste Education



Electricity



Material Recycling Facility



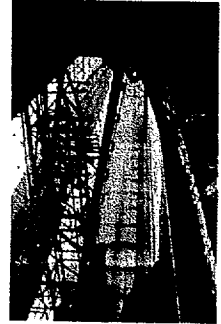
Materials for Recovery



Kitchen & Garden waste

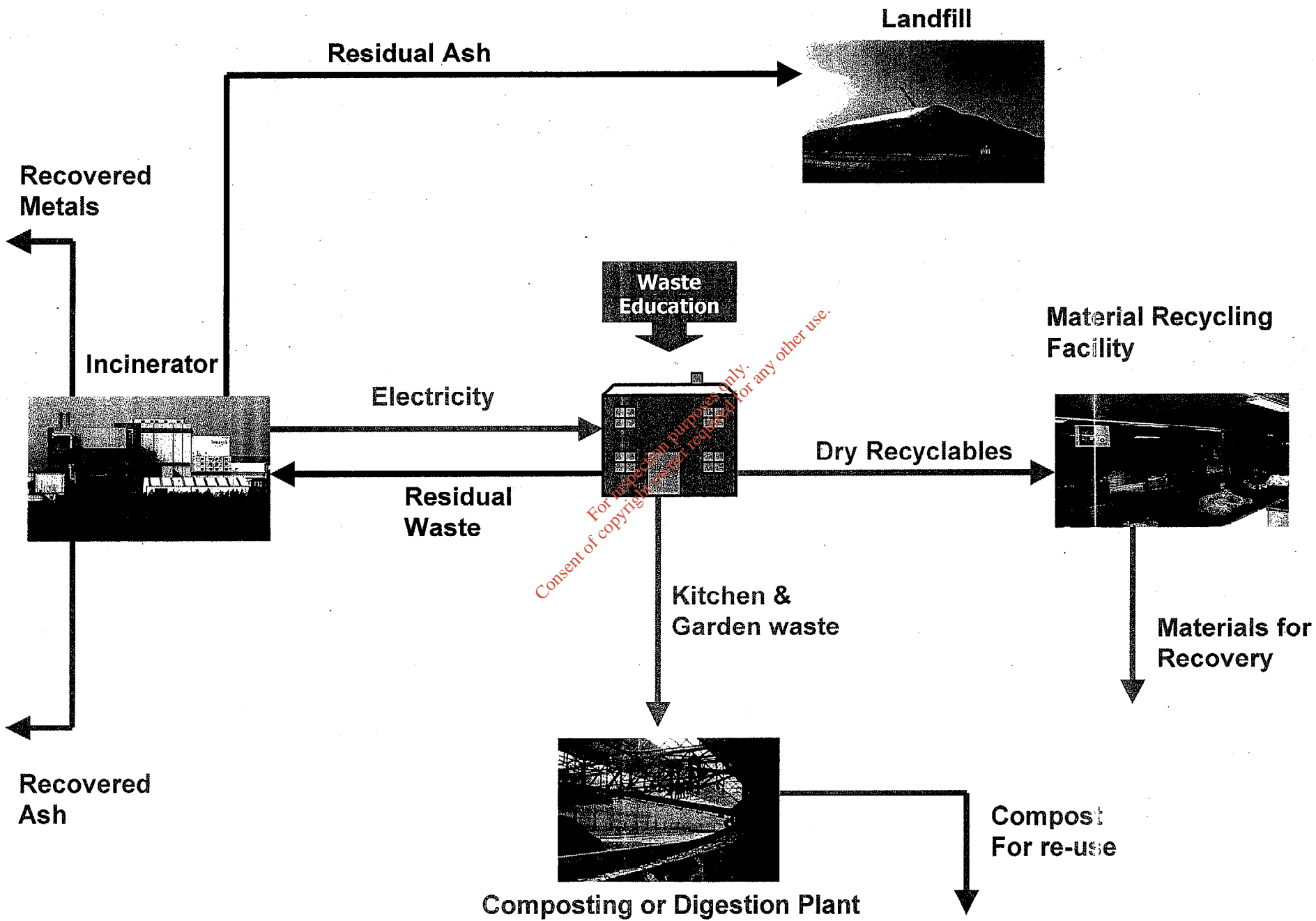


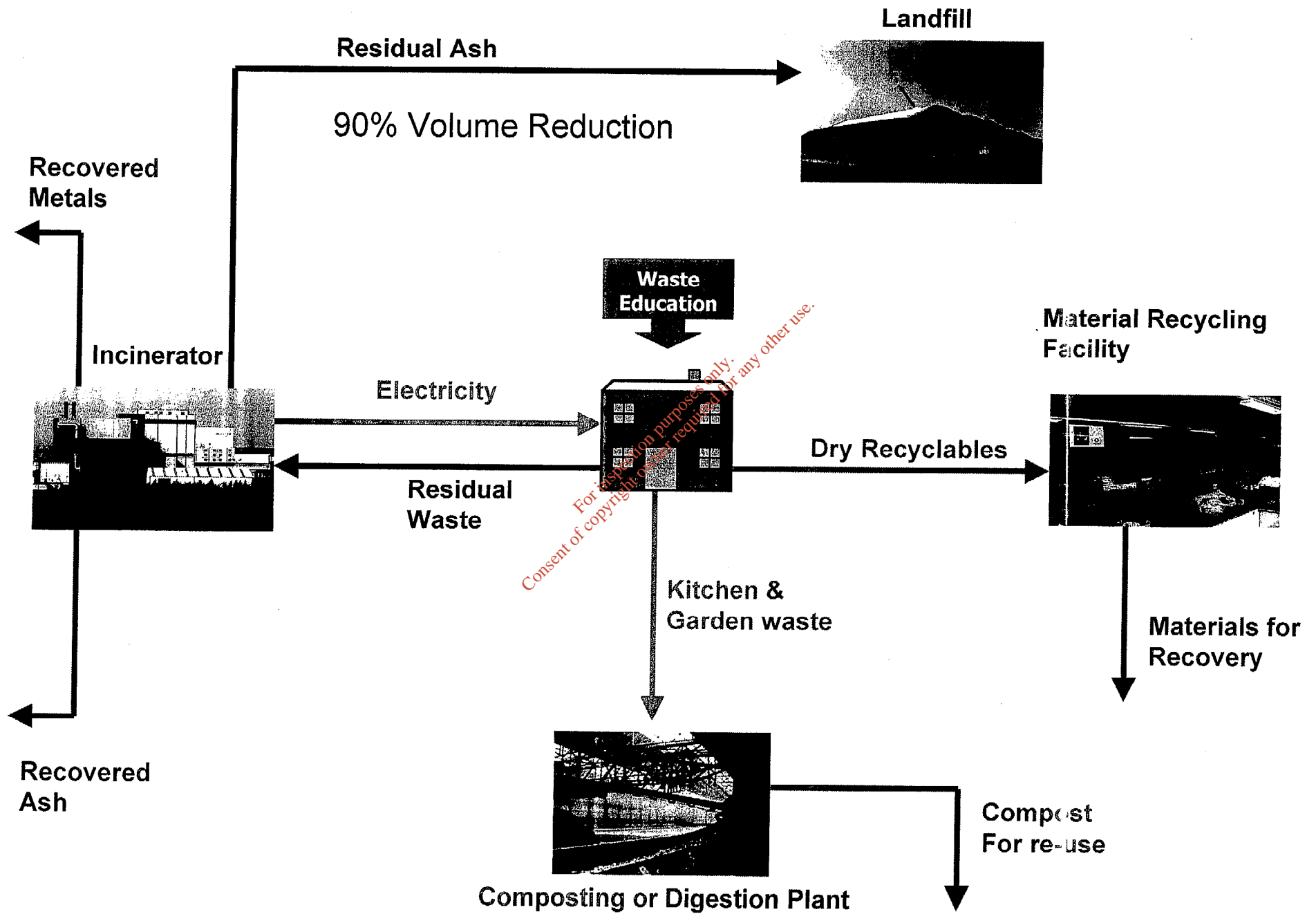
Recovered Ash



Compost For re-use

Composting or Digestion Plant







Ash Landfill

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

Indaver Belgium



Hazardous Landfill

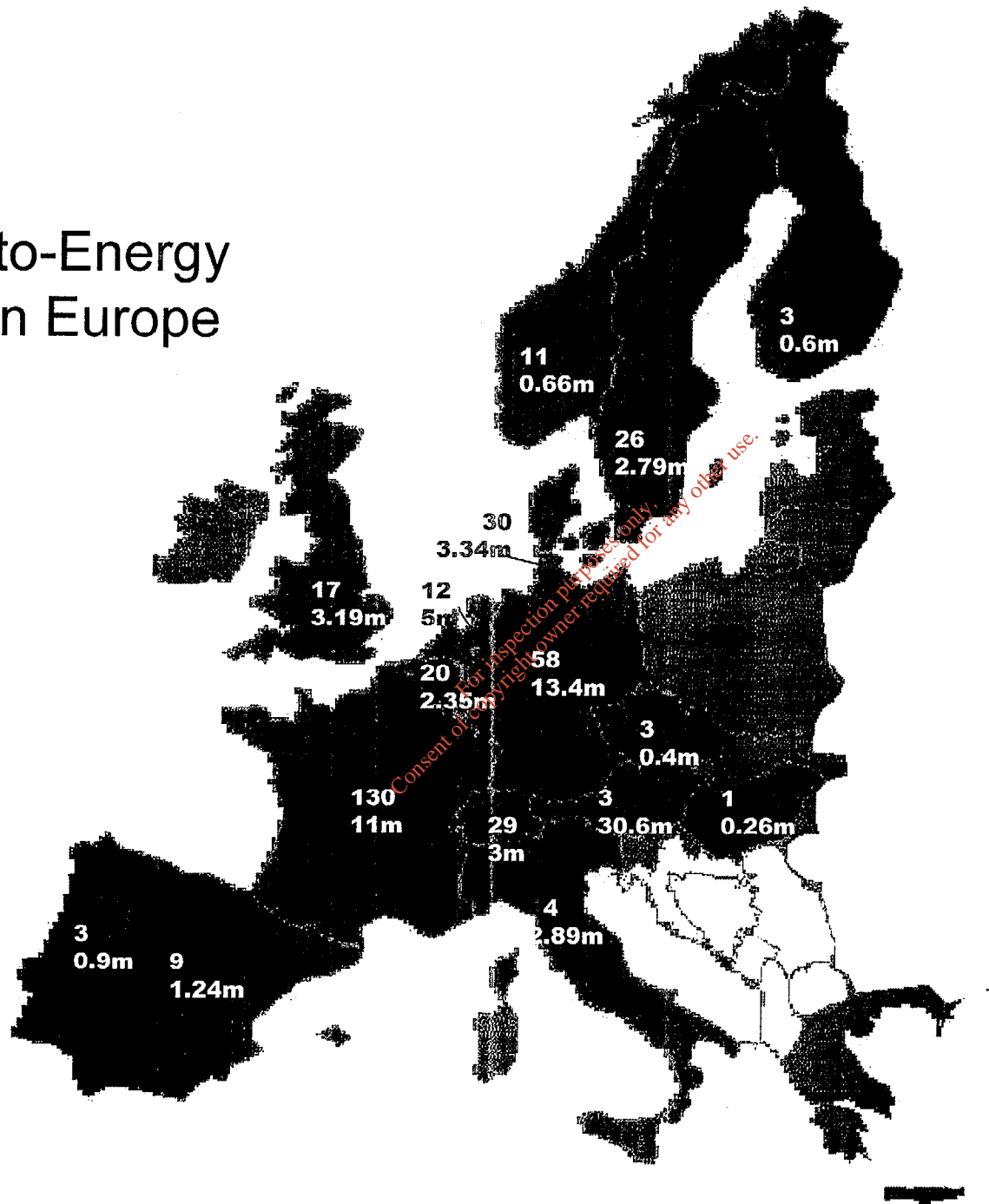


Benefits of an Incinerator

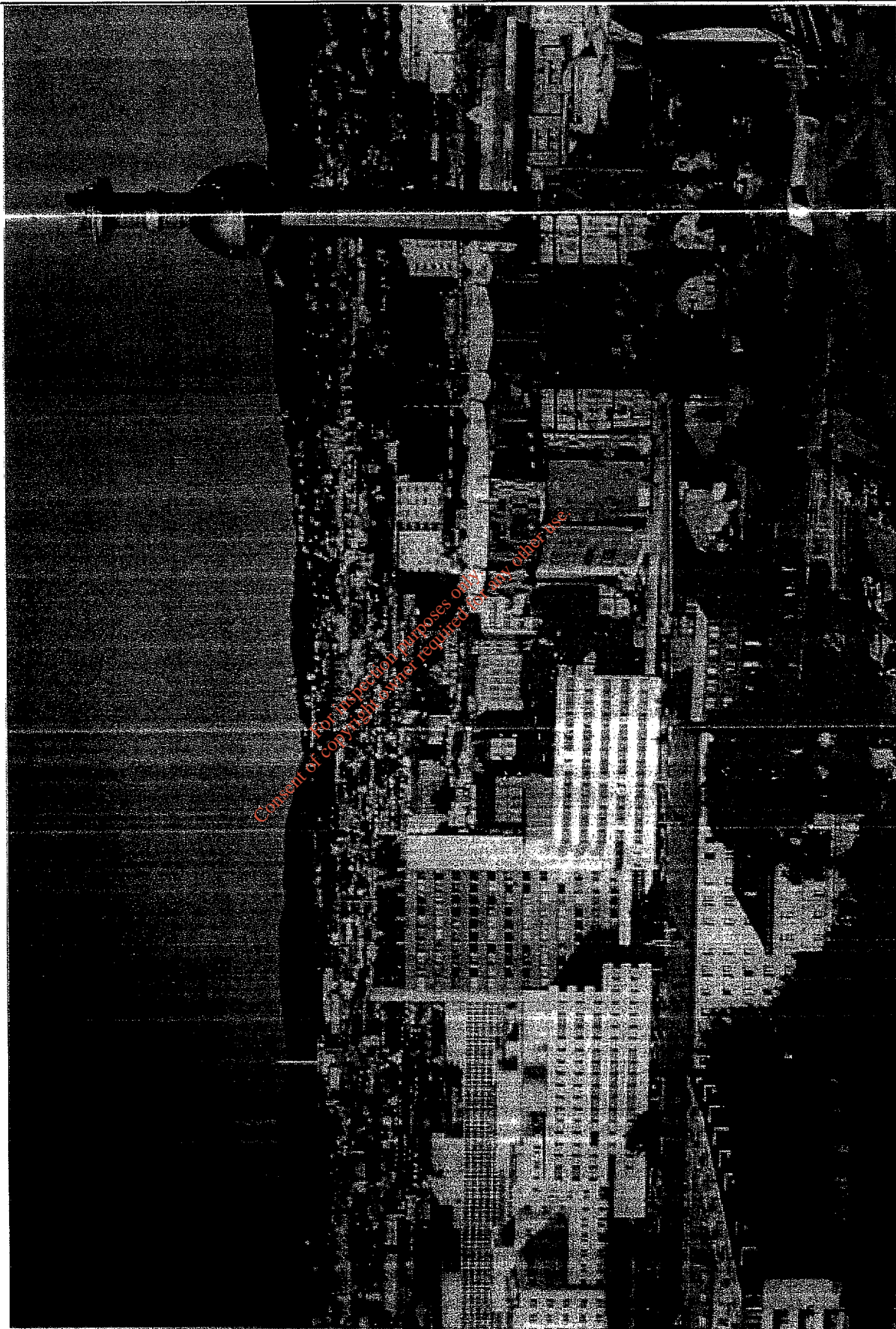
- Reduces the Volume
- Produces Electricity
- Recovers Metals
- Recovers Ash / Aggregate



Waste-to-Energy Plants in Europe



Vienna

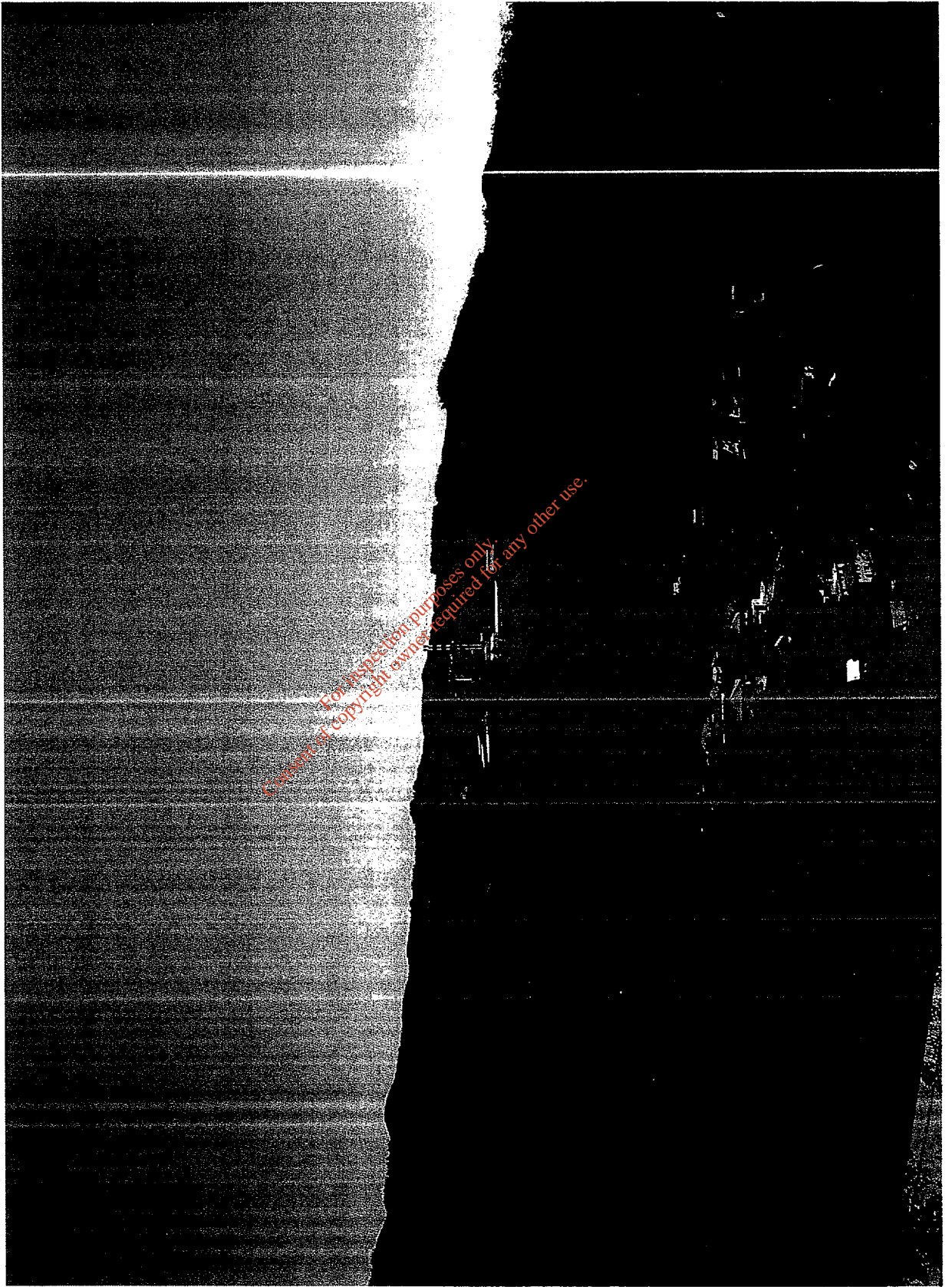


For inspection purposes only
Comment of Copyright cannot be required for other uses

Paris

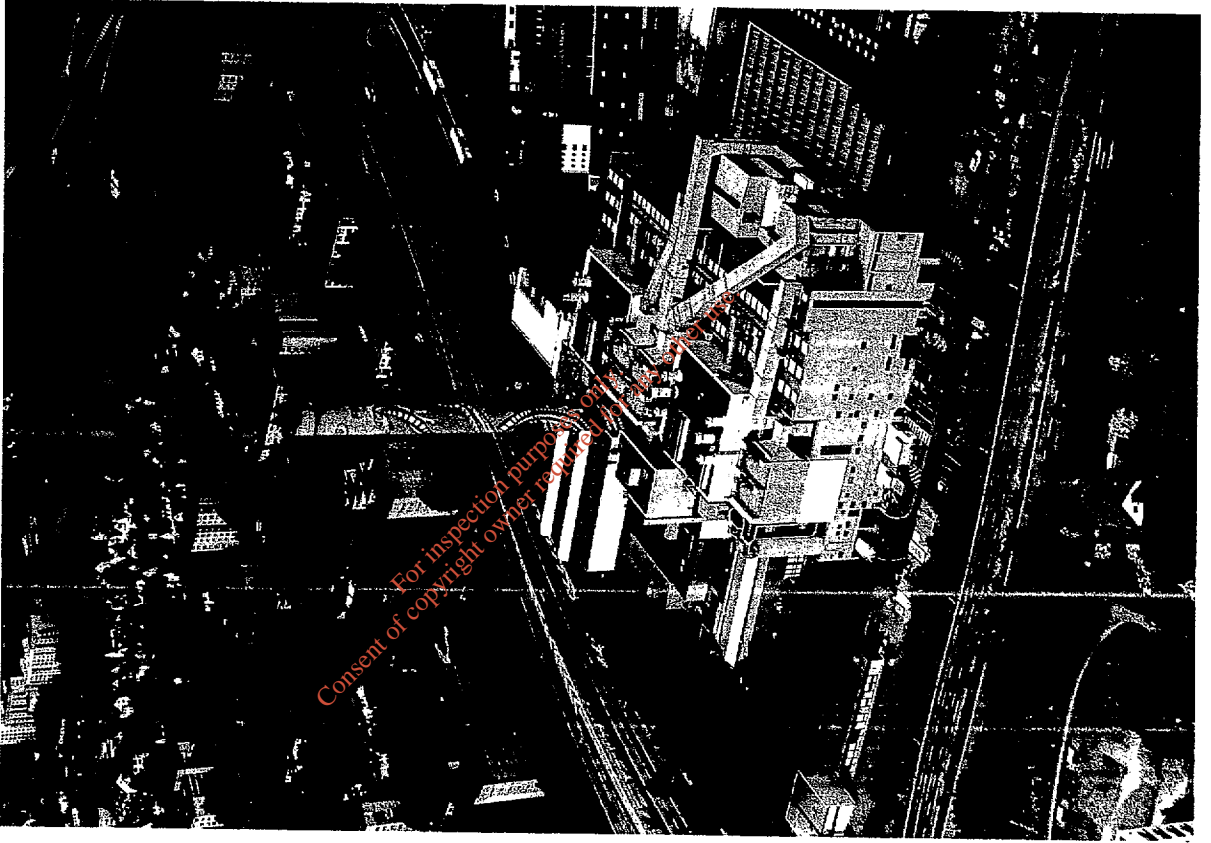


Madeira

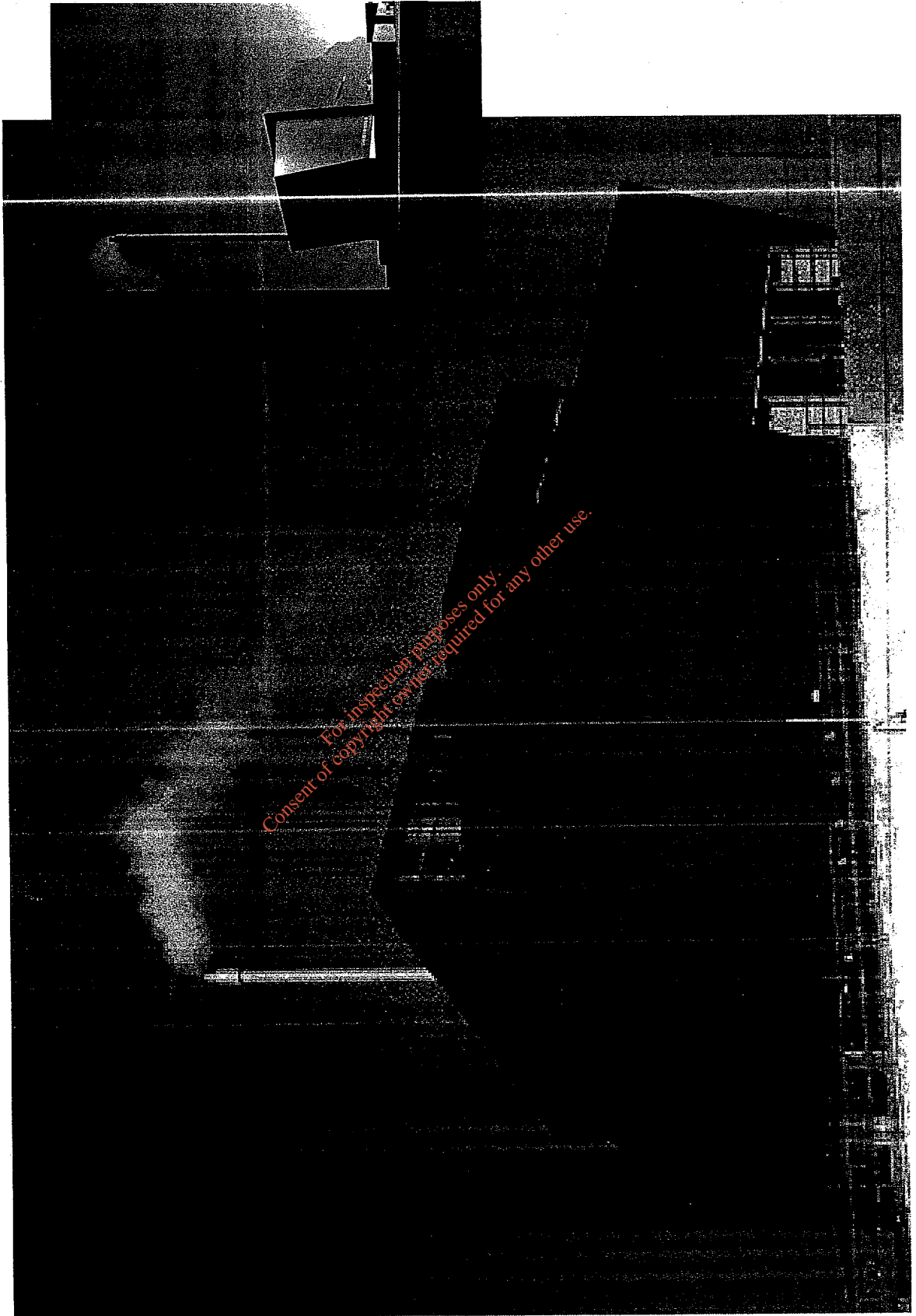


For inspection purposes only.
Commercial copyright cannot be required for any other use.

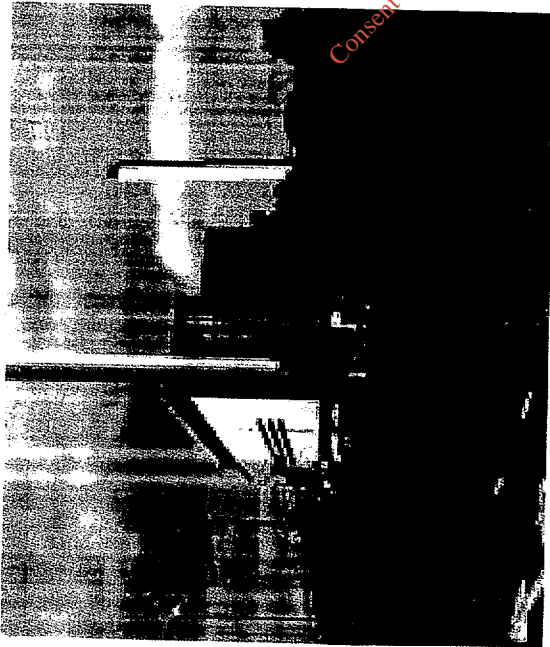
Frankfurt



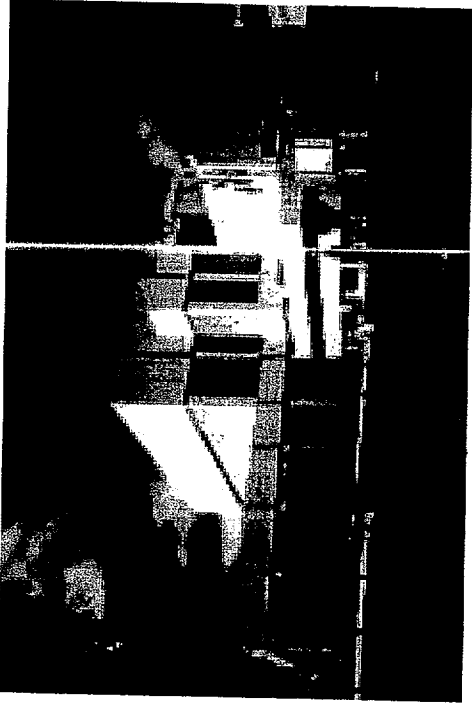
Esberg, Denmark



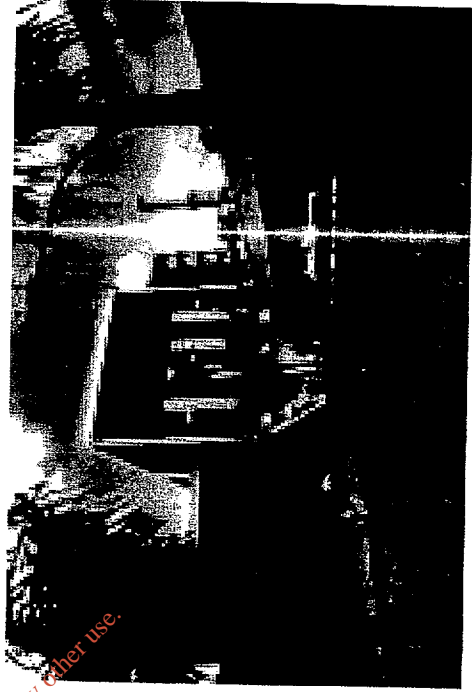
Other Incinerators



Malmö, Sweden

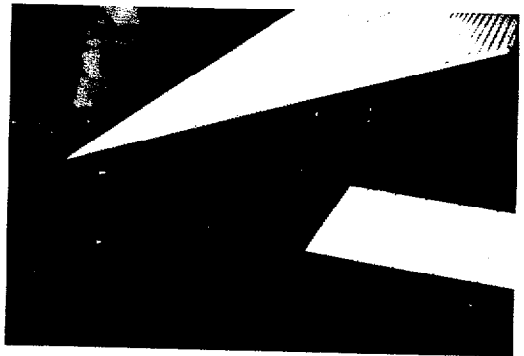


Stanislaus, California



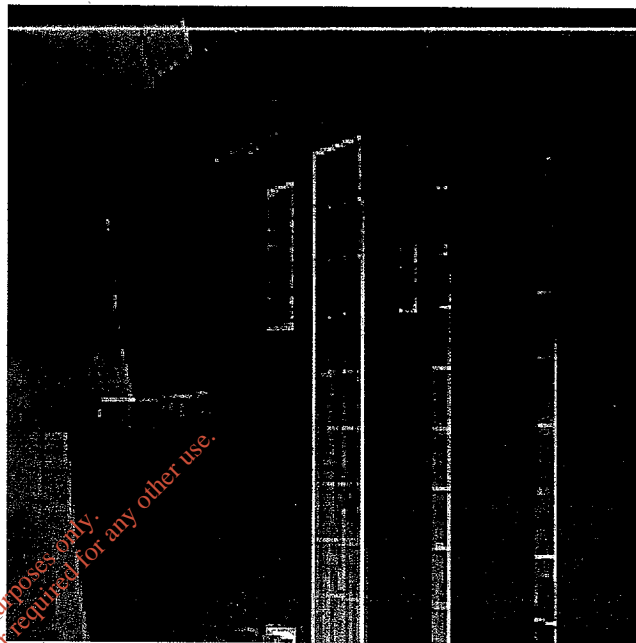
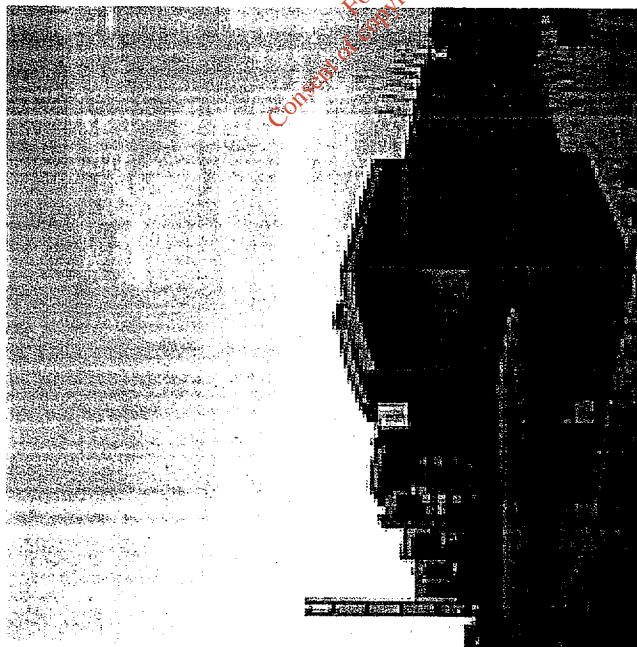
Florida, USA

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



Refa,
Denmark

Alkmaar, The Netherlands



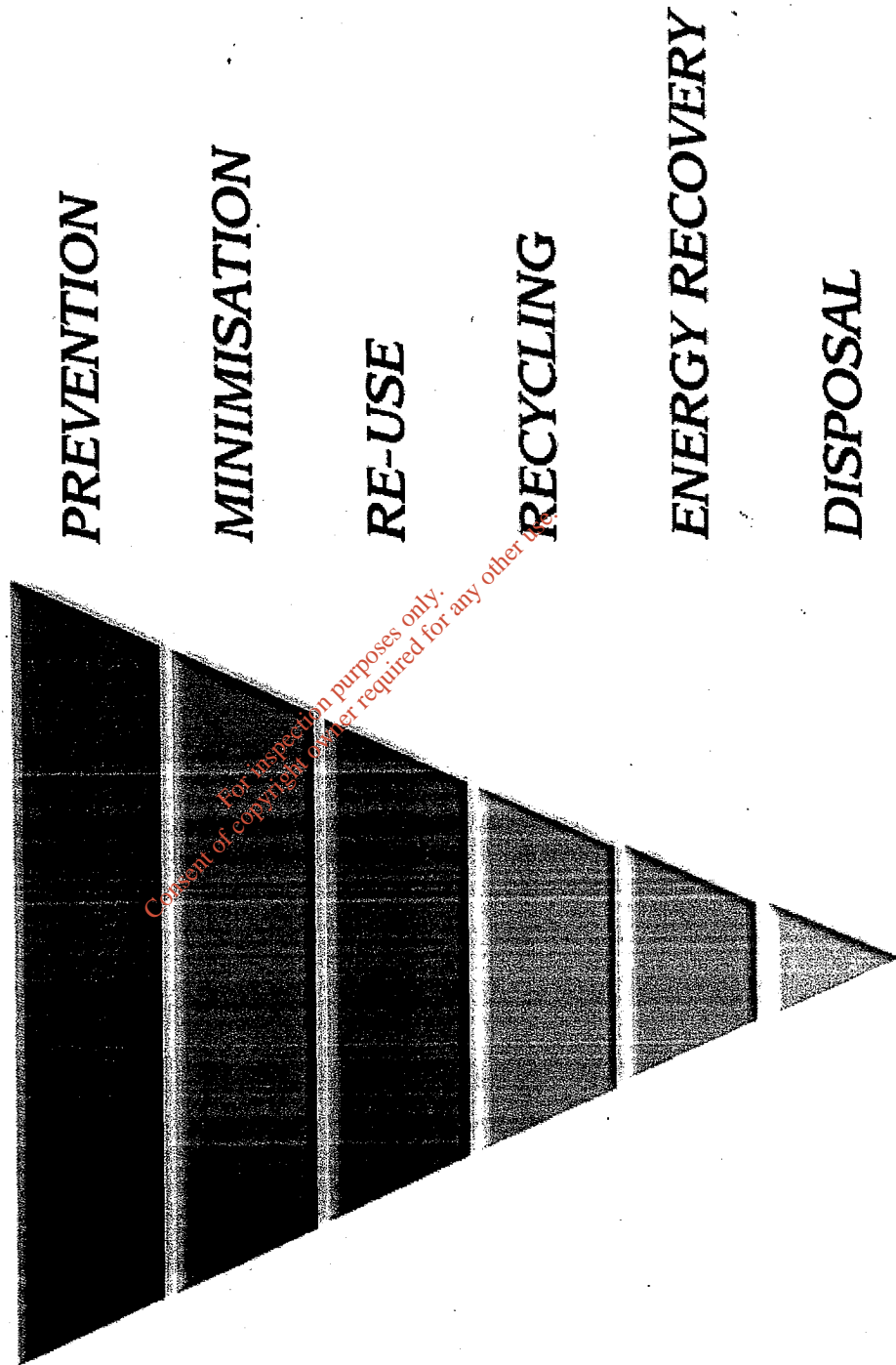
For inspection purposes only.
Consent of copyright owner required for any other use.

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

Zero Waste?



Waste Hierarchy



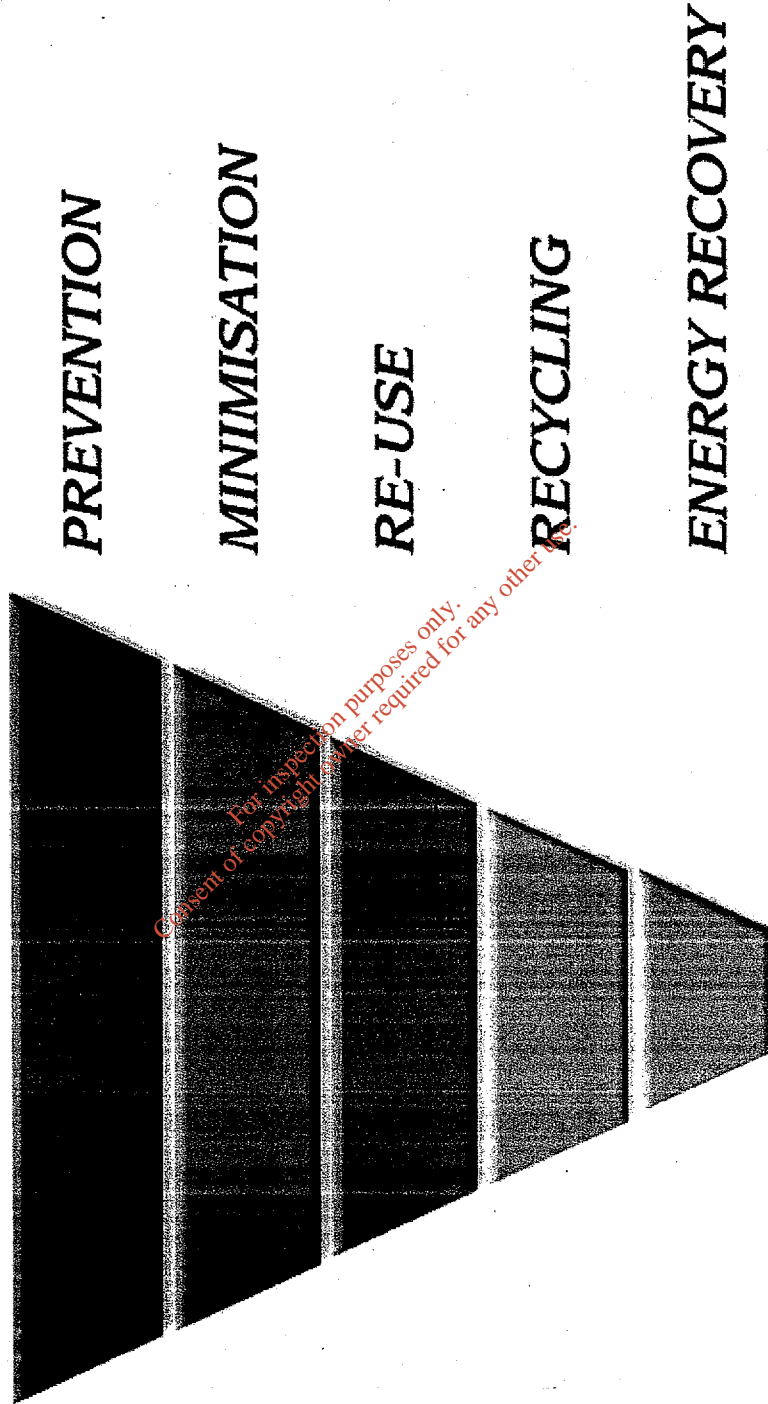
Zero Waste



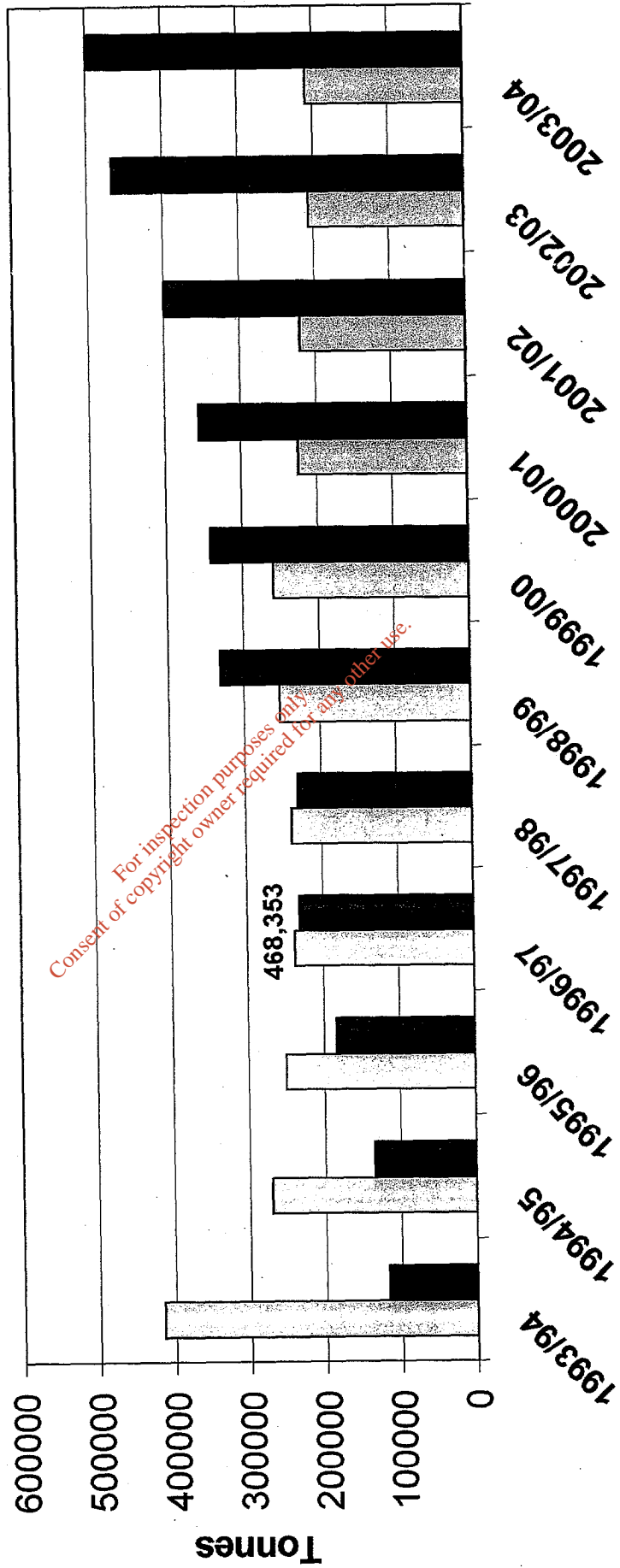
PREVENTION

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

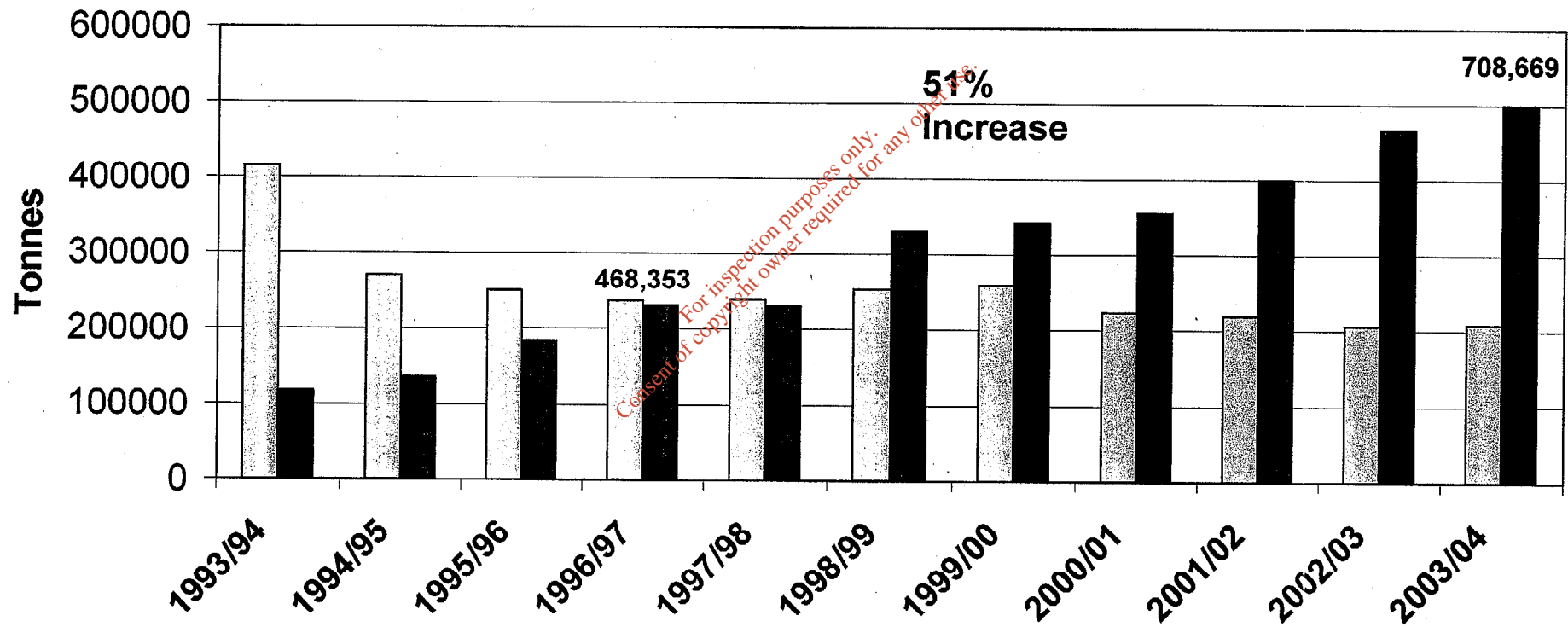
Zero Waste to Landfill



So How Are They Doing In Canberra?

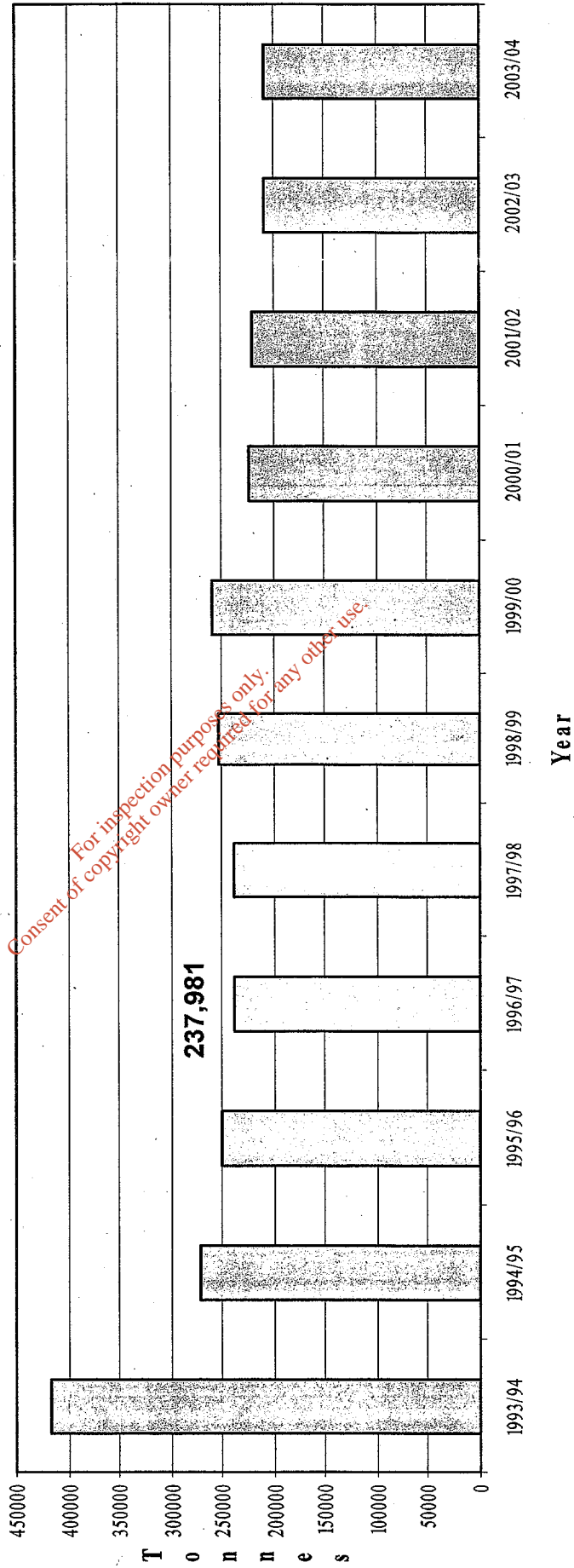


So How Are They Doing In Canberra?



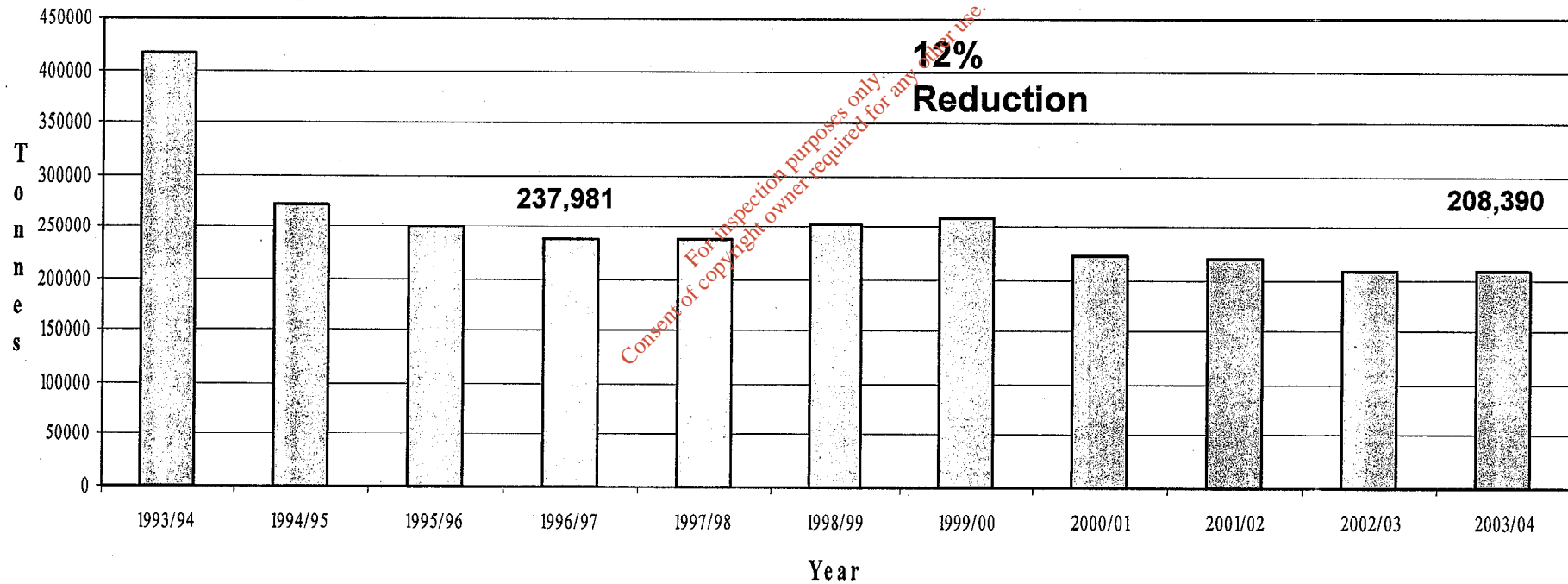
Zero Waste Canberra

Total Waste to Landfill



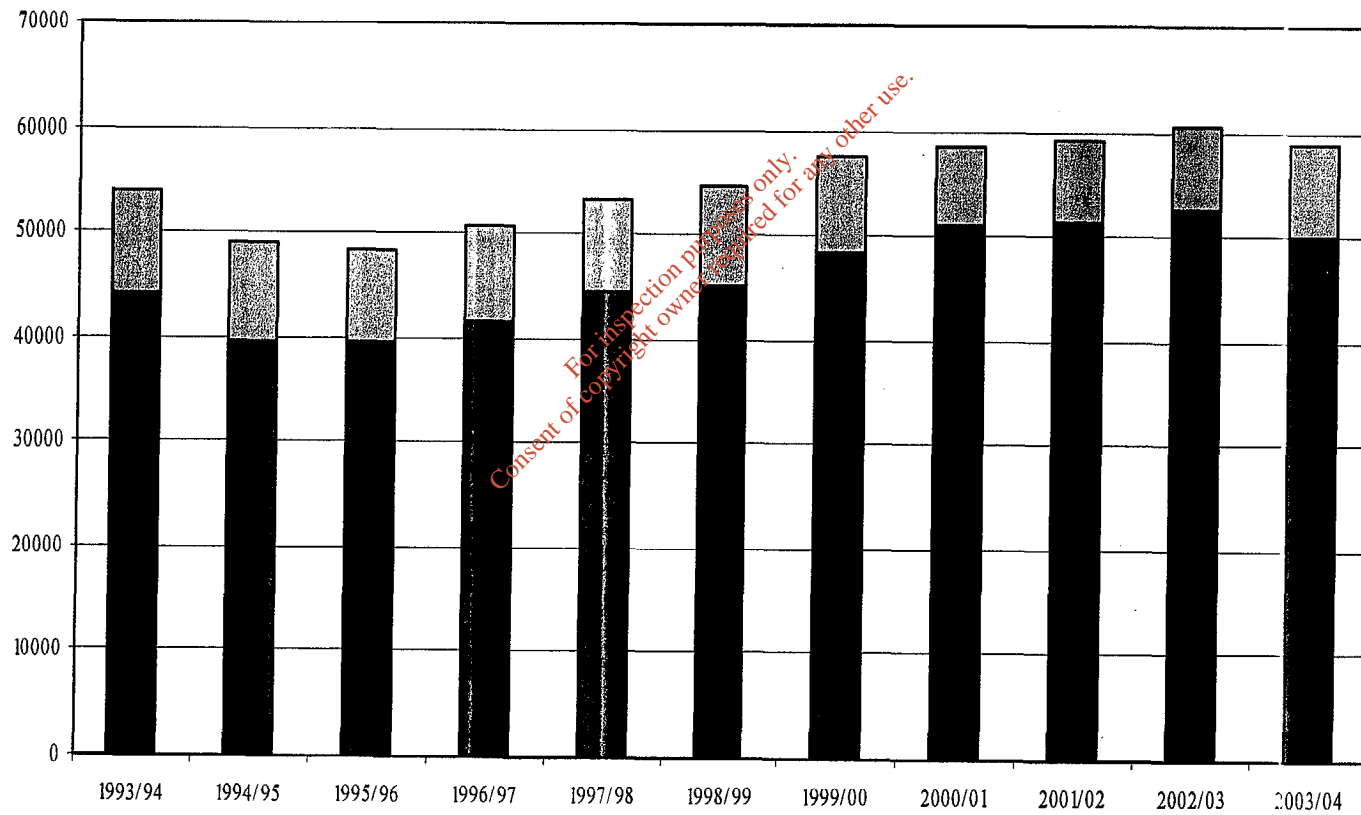
Zero Waste Canberra

Total Waste to Landfill



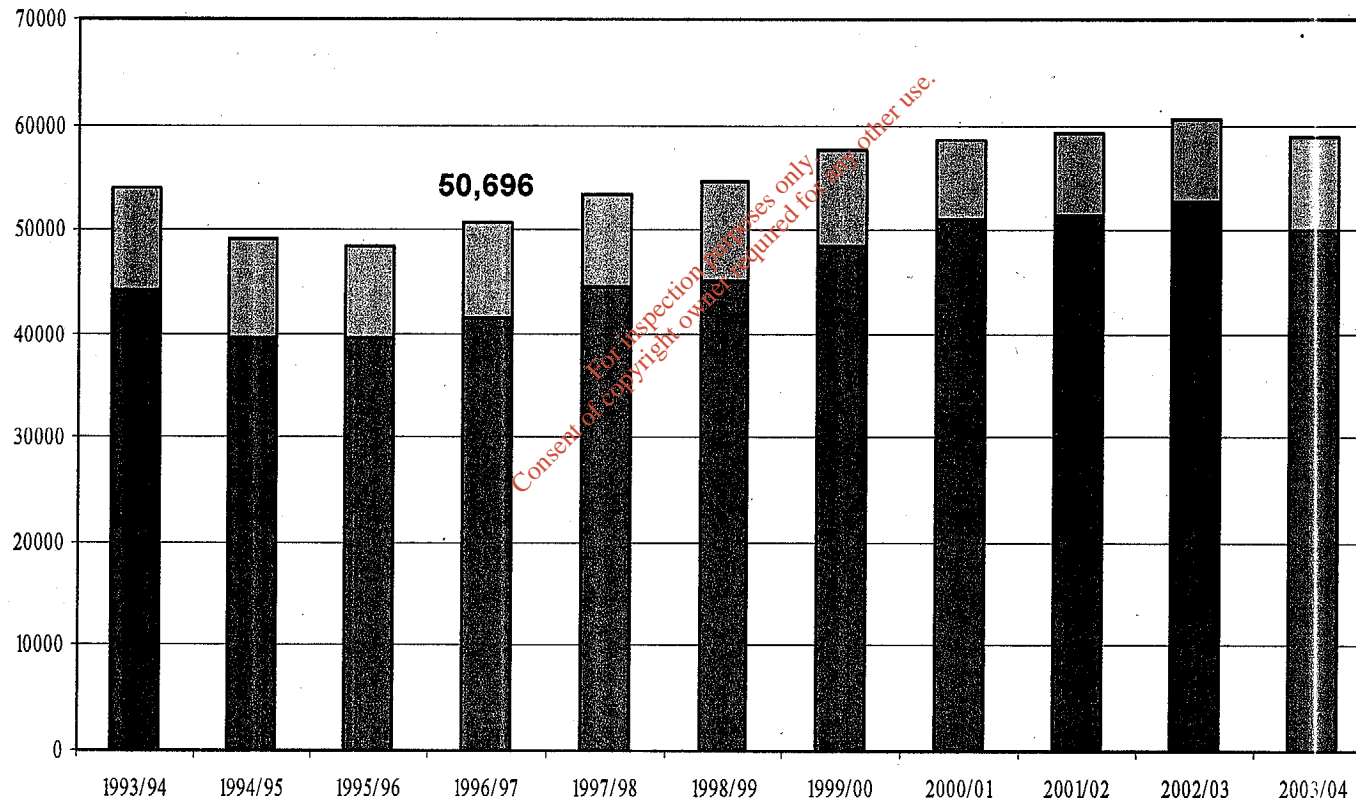
Zero Waste Canberra

Domestic Waste To Landfill



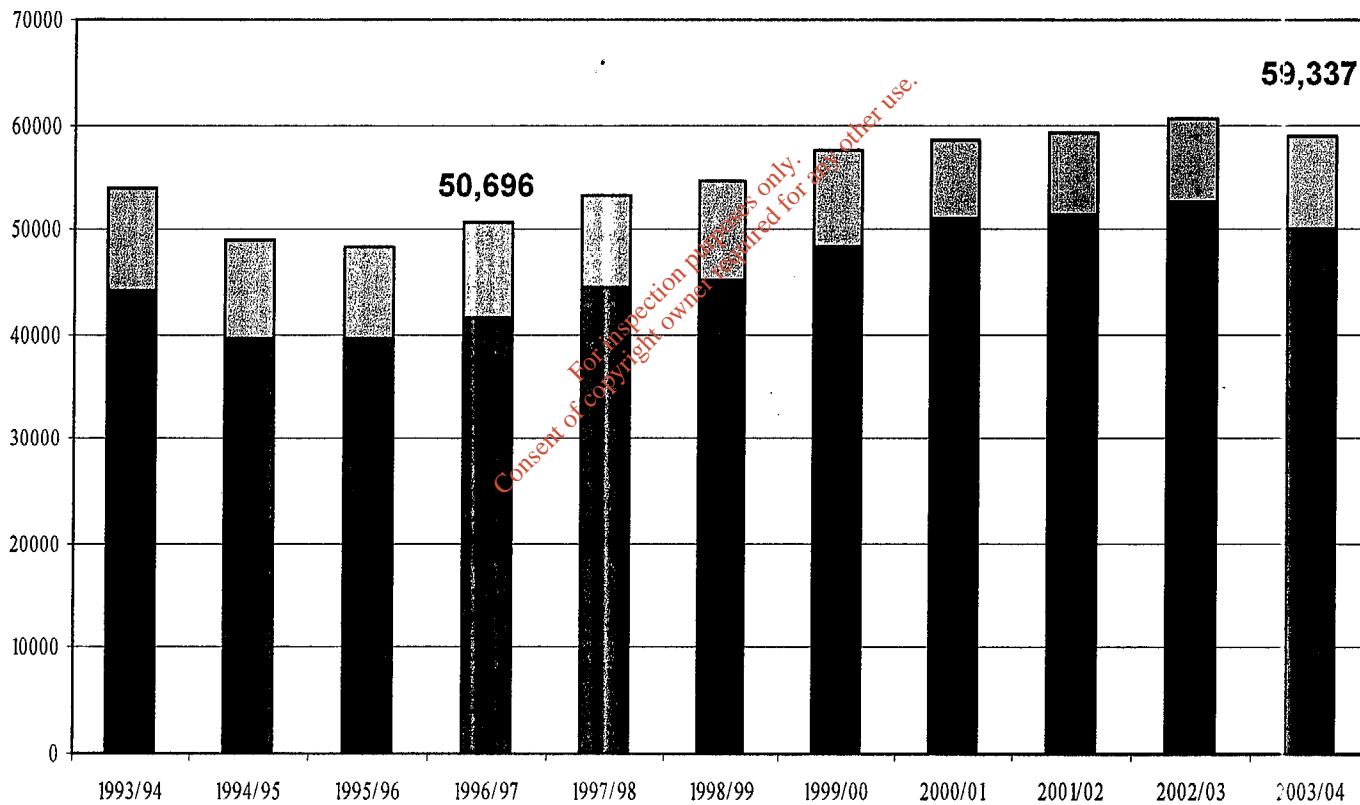
Zero Waste Canberra

Domestic Waste To Landfill



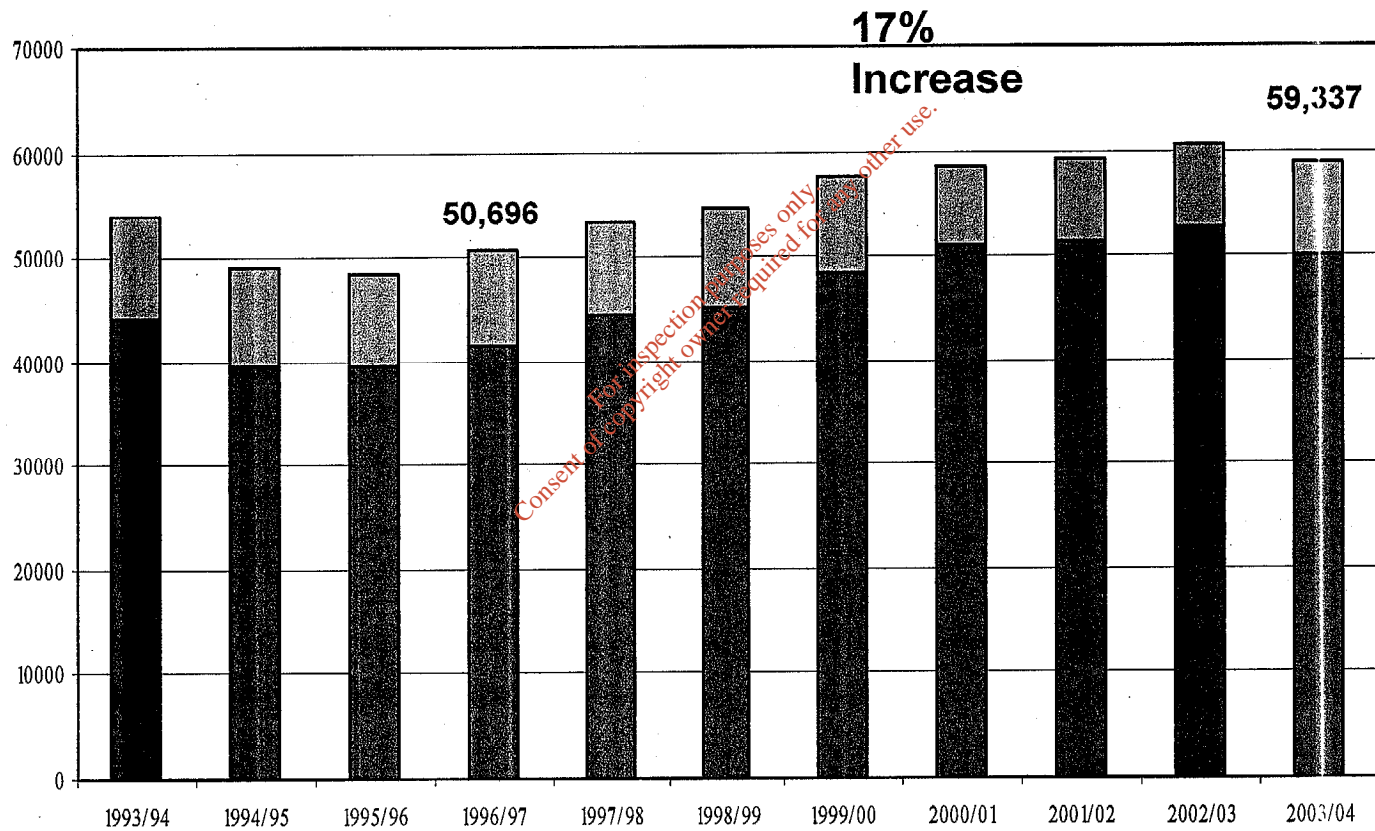
Zero Waste Canberra

Domestic Waste To Landfill



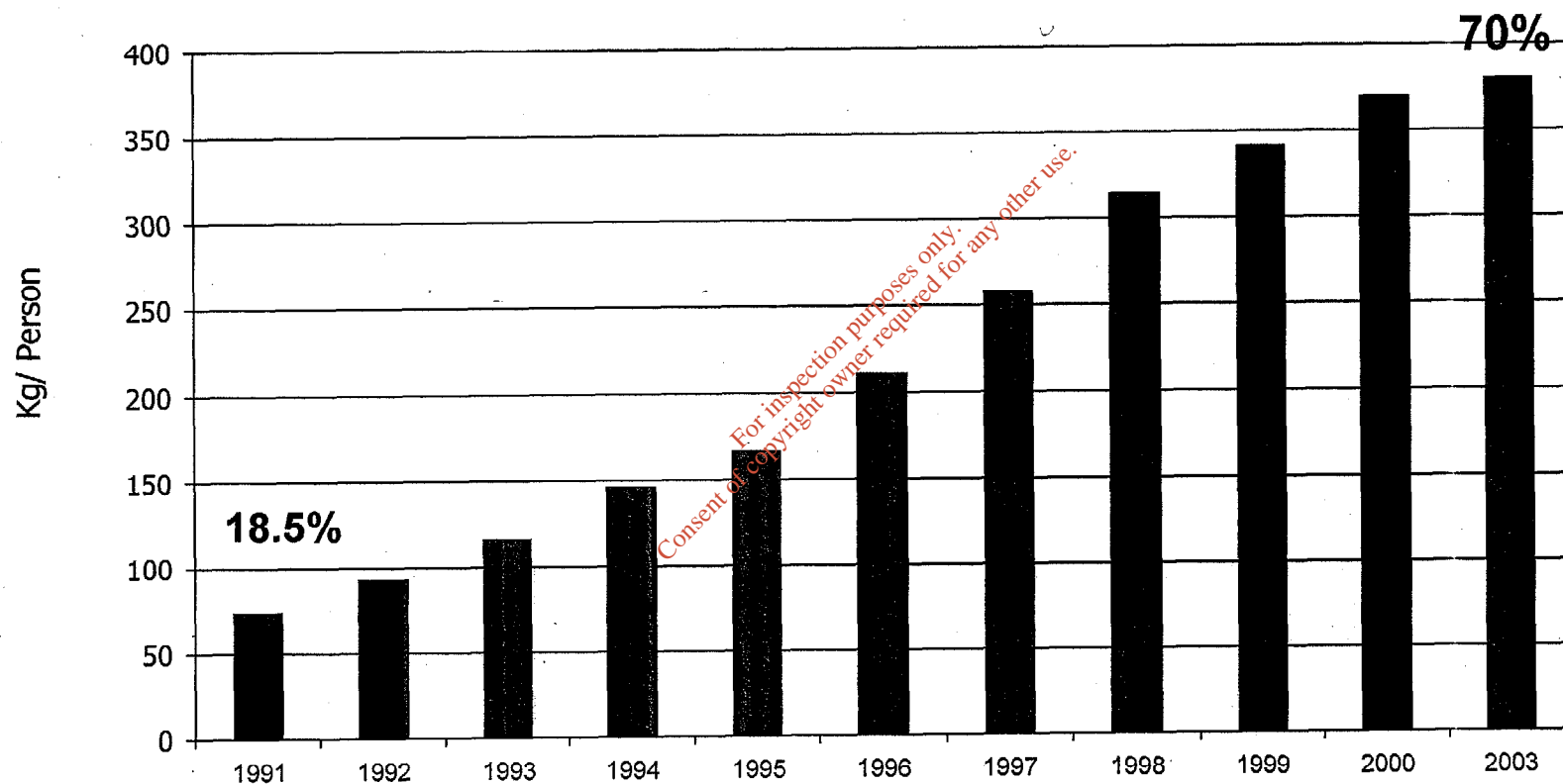
Zero Waste Canberra

Domestic Waste To Landfill



Integrated Waste Management in Flanders

Recycling Rates

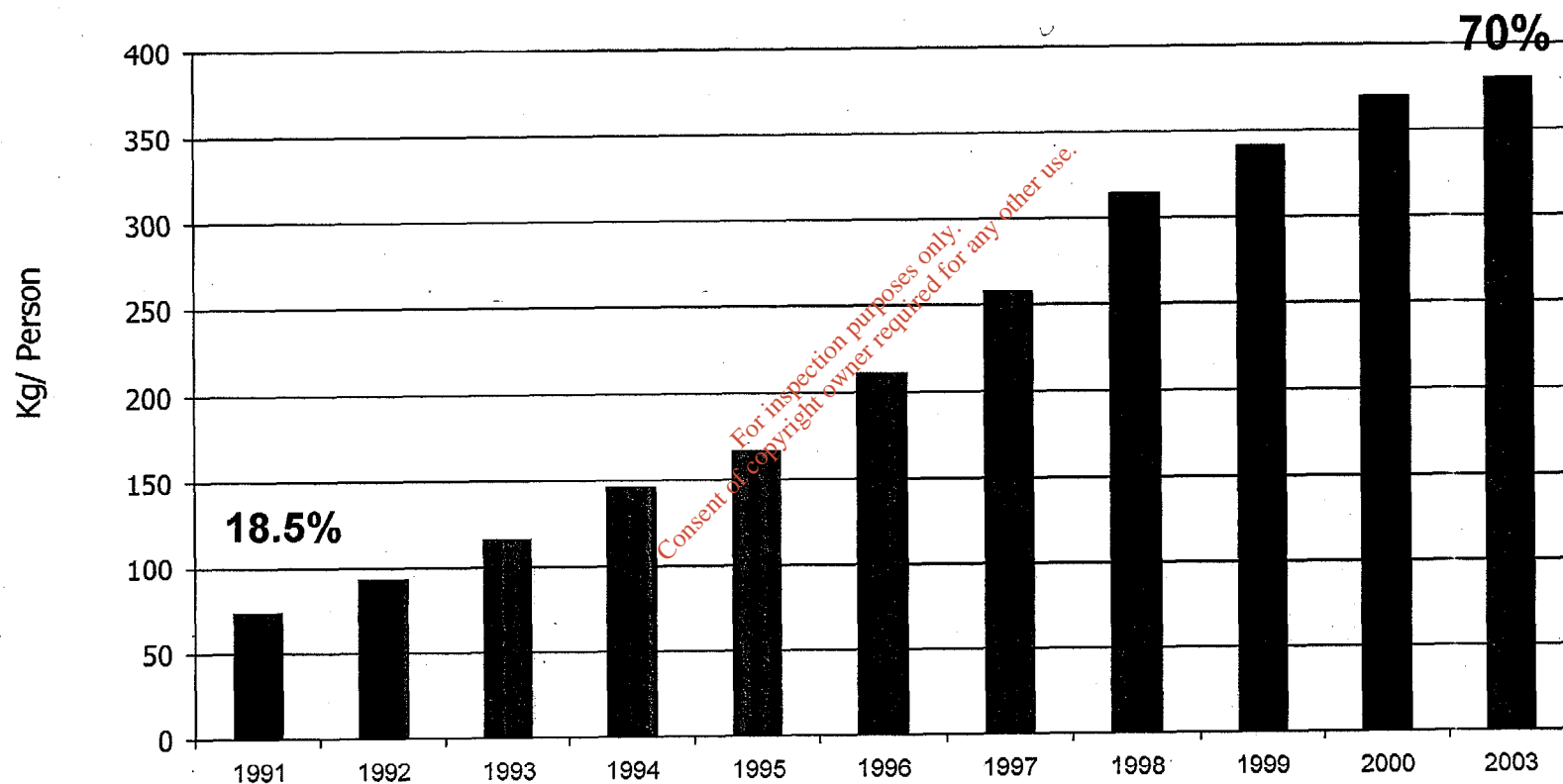


Flanders has over 1,2 million tonnes of incineration capacity

Data Source: Ovam, Flemish Waste Authority, 2003.

Integrated Waste Management in Flanders

Recycling Rates



Flanders has over 1,2 million tonnes of incineration capacity

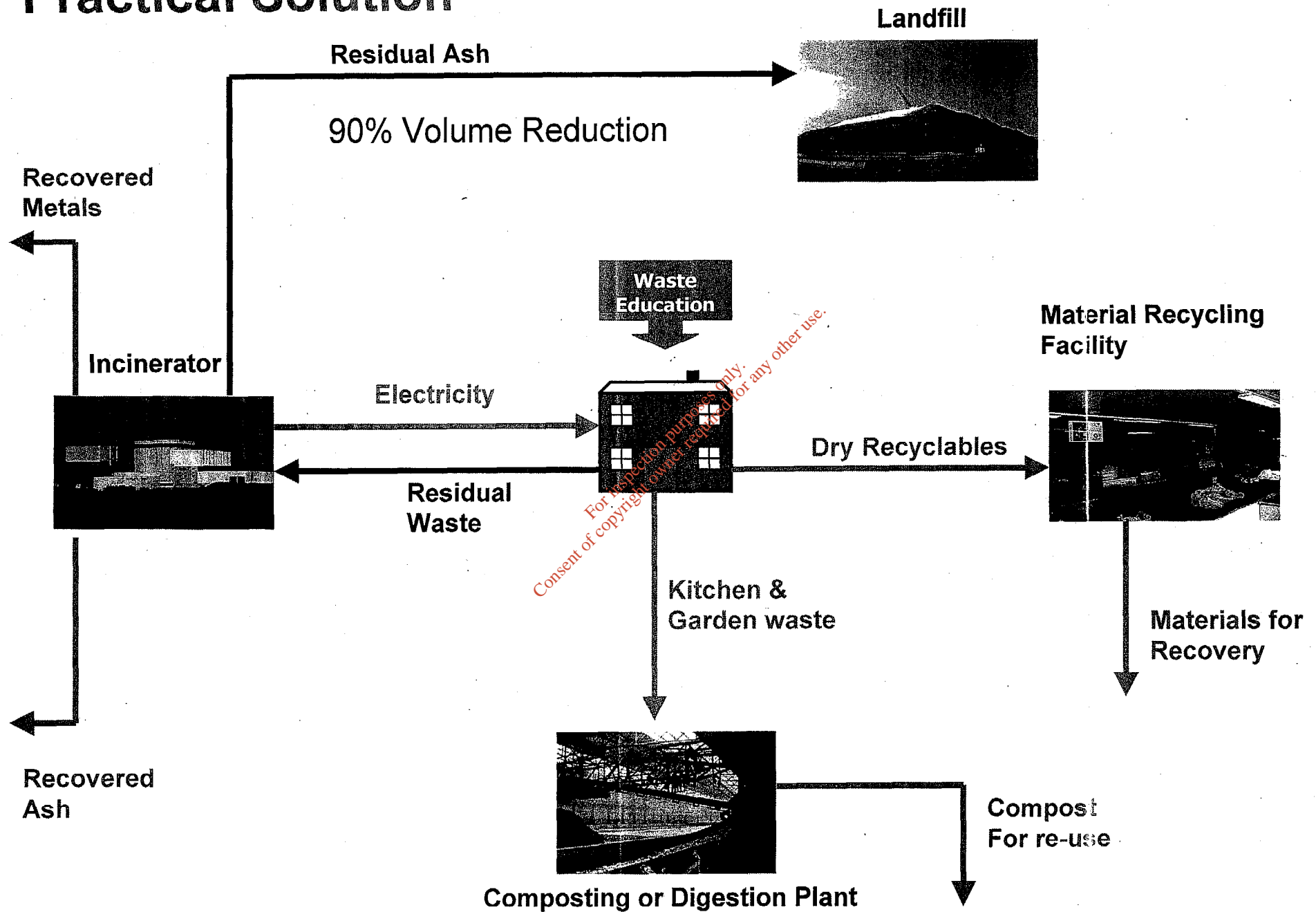
Data Source: Ovam, Flemish Waste Authority, 2003.

So What Is The Solution for Ireland?

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



Practical Solution

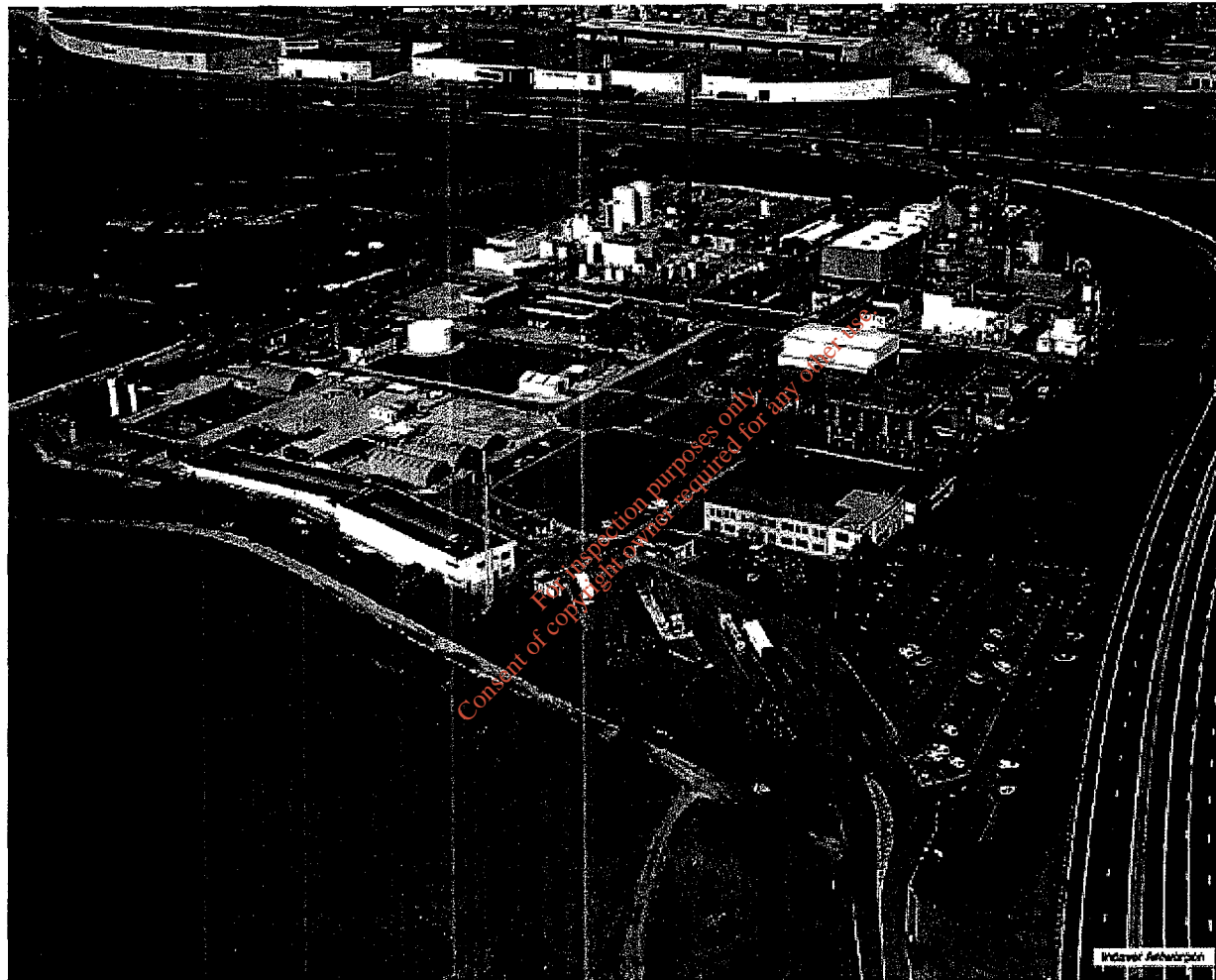


Company Competency

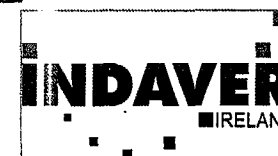
For inspection purposes only.
Consent of copyright owner required for any other use.



Indaver Belgium



Hazardous Waste Management Facility, Antwerp



Indaver Belgium



IVAGO Municipal Grate Incinerator, Ghent



Municipal Grate Incinerator, Beveren



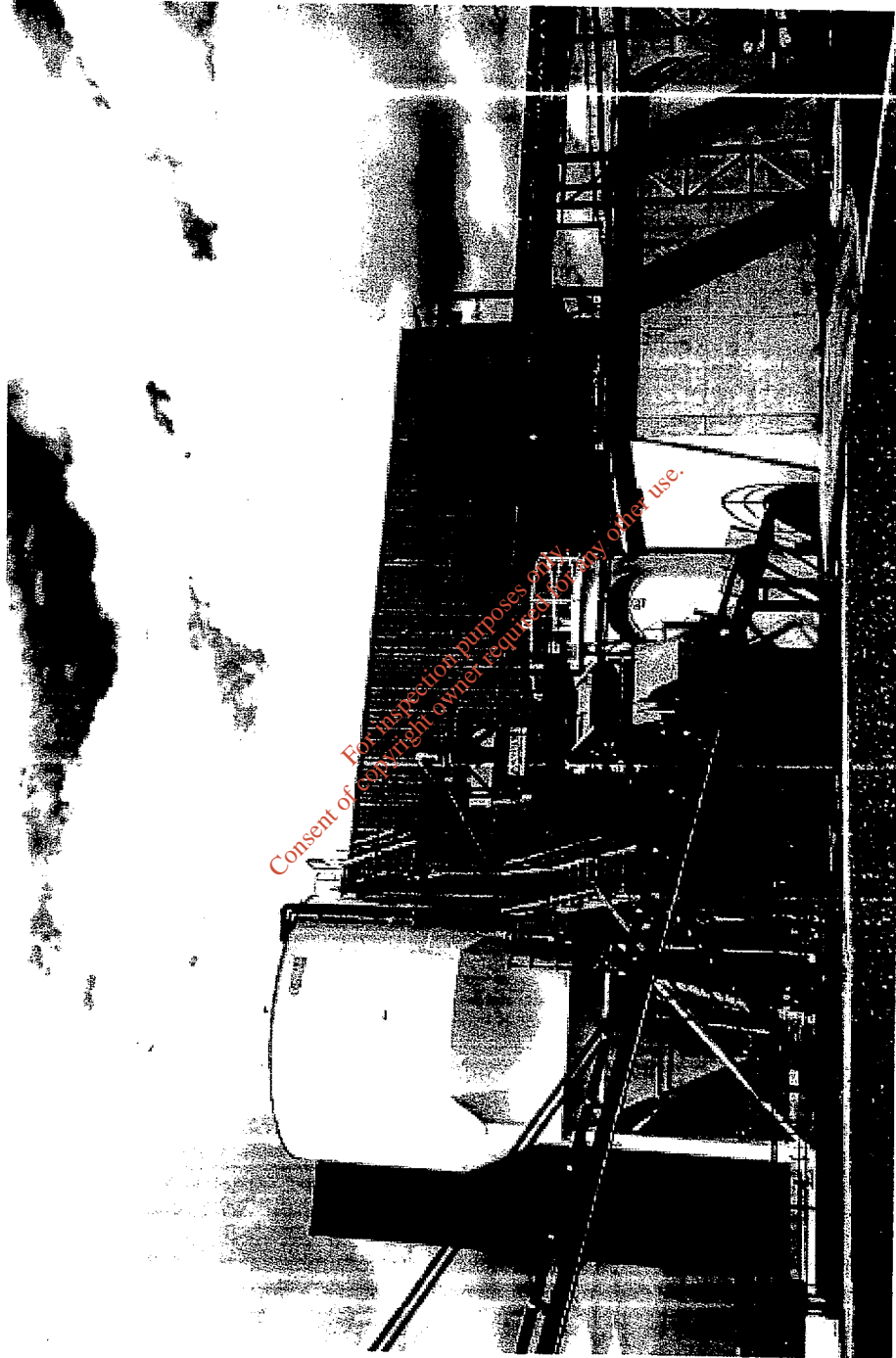
Indaver Belgium



SLECO Industrial Fluidised Bed Incinerator



Indaver Belgium



Ash Recovery Plant



Indaver Belgium



Hazardous & Non-hazardous Landfills



Indaver Belgium



Compost Facility, Grimbergen



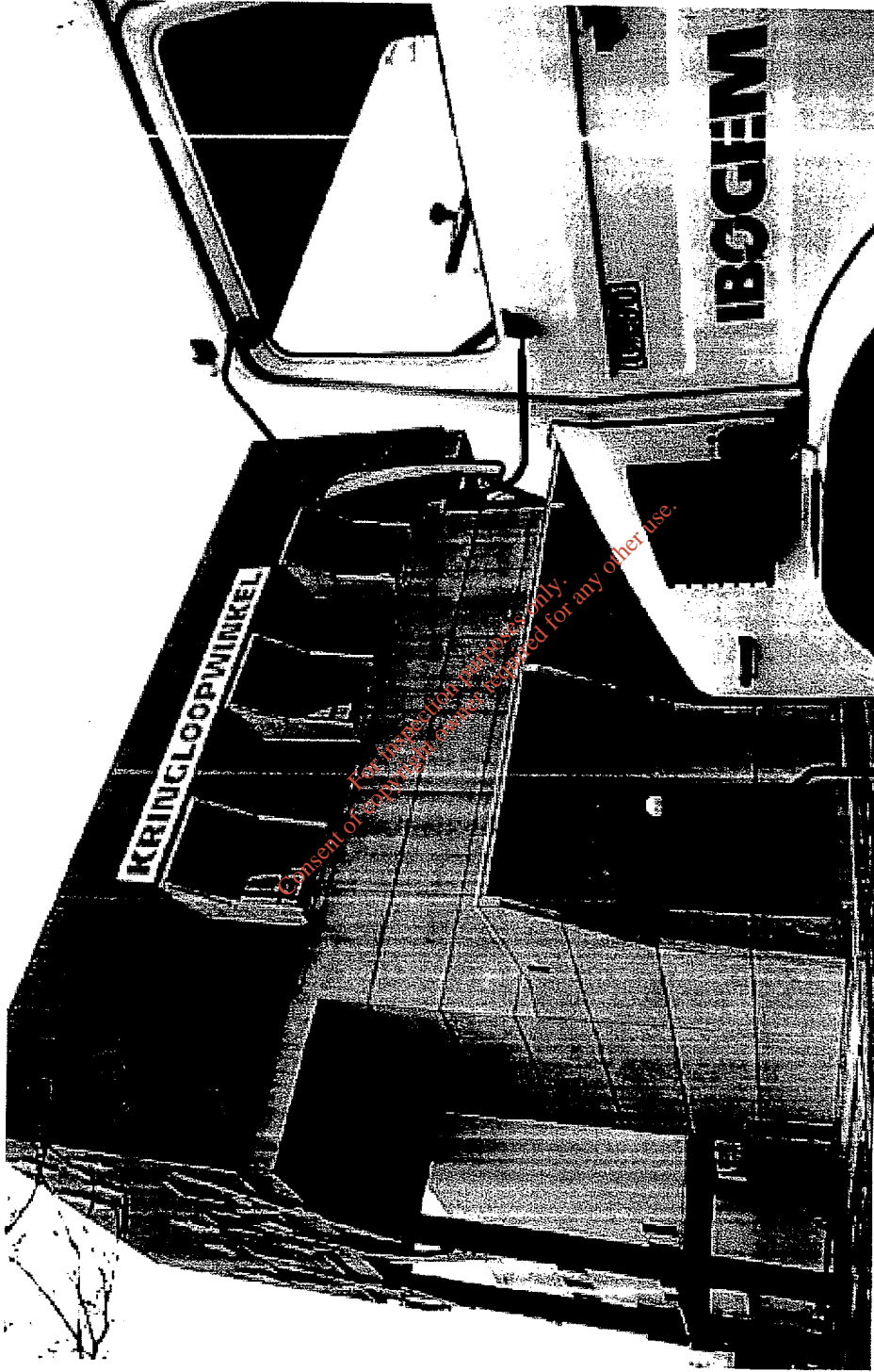
Indaver Belgium



Relight Fluorescent Tube Recycling Facility



Indaver Belgium



IBOGEM Waste Education Centre & Second Hand Store



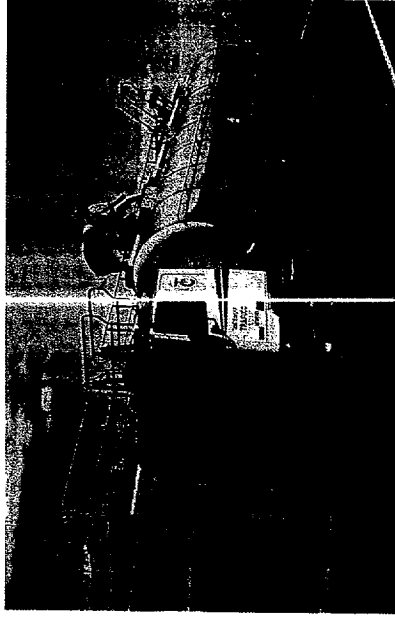
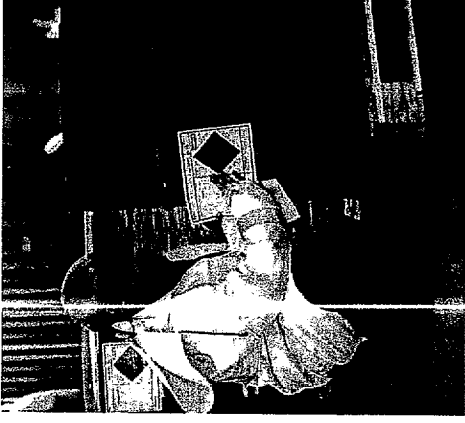
Indaver Ireland

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



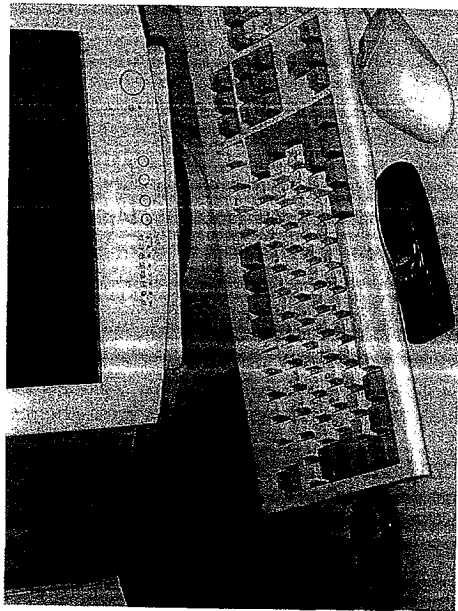
Export of Hazardous Waste

- Customers
 - Pharmaceutical sector
 - Chemical sector
 - Electronic sector
- Provide solutions for the disposal / recovery / treatment of waste
- Operate EPA licensed transfer station in Dublin Port
- Export waste under TFS documentation
 - Compliance
 - Traceability



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

Special Waste



- Partners with RehabRecycle for the recycling of:
 - Fluorescent Tubes
 - WEEE
 - Fridges
- Household hazardous waste

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



Recycling

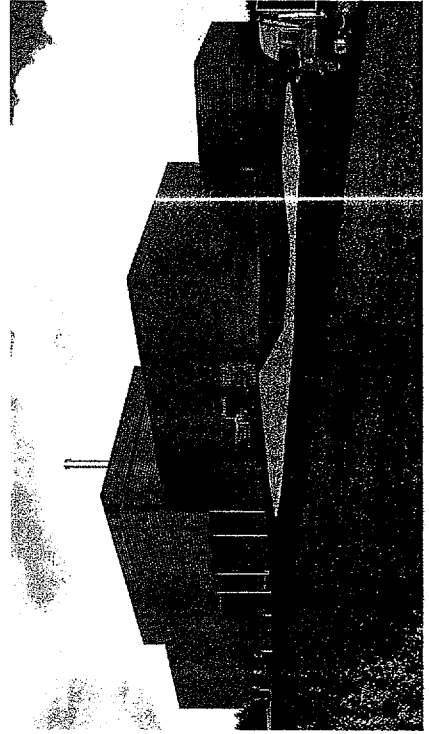
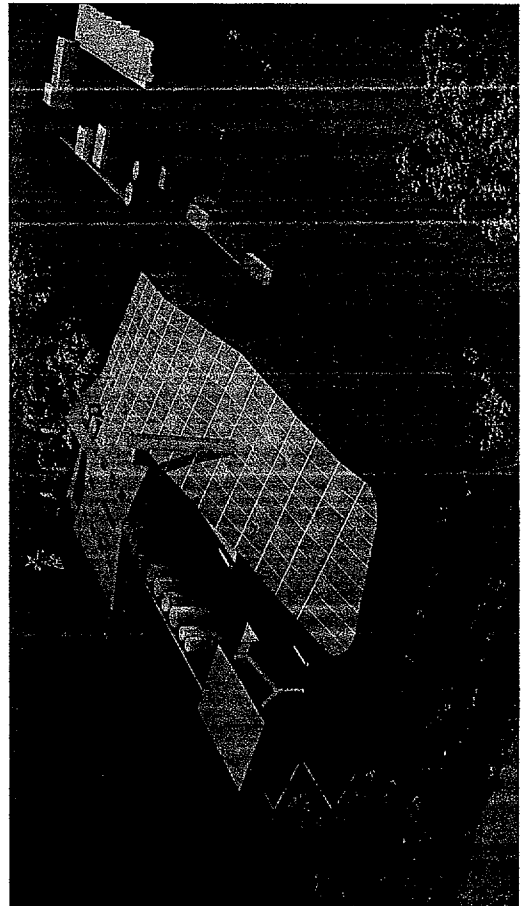
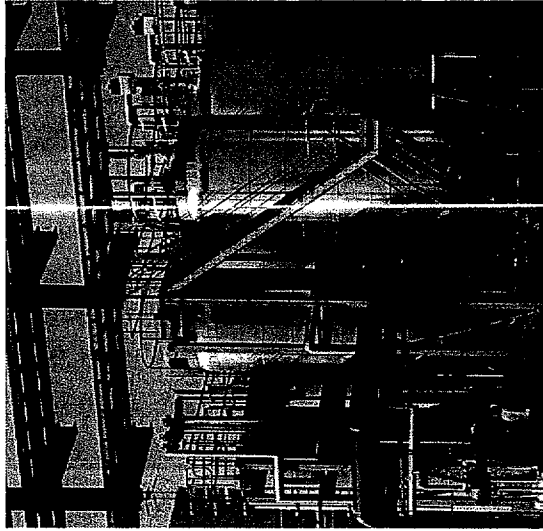
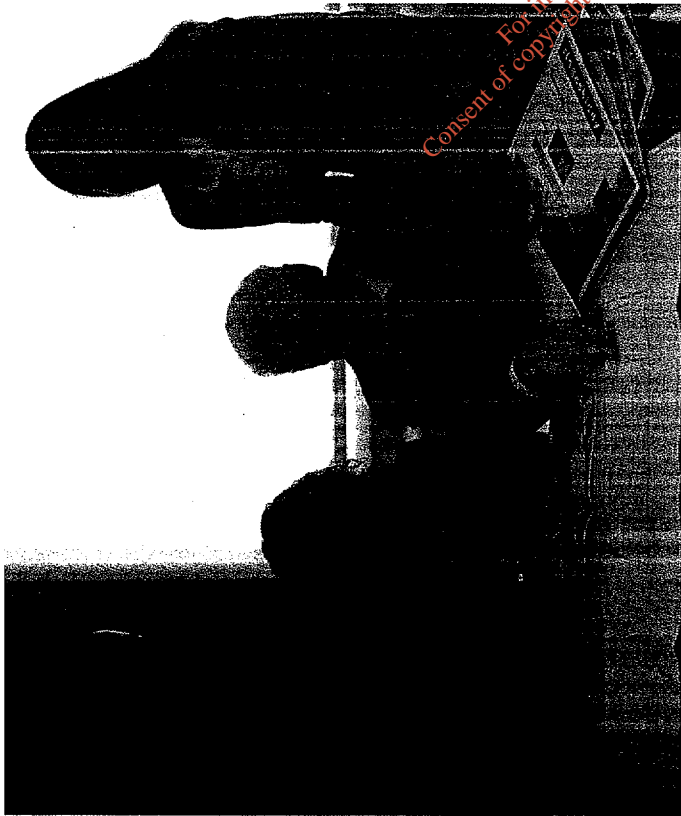


- Paper Recycling in Leinster & Munster
 - Newspapers & Magazines
 - Office Paper
- Operation of Recycling Centres
 - Meath
 - Limerick

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



Project Management & Communications



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

World Health Organisation
Public Health
Innovation & Resilience
Air & Water Quality

European Commission
5th & 6th Environmental Action Programme
Innovative Directive

Environment

Energy

EPA
Local Authority

Waste
Local Authority

Water
Local Authority

Local
Government

Local
Public Health
Authority

Waste Movement
Internal &
External

EPA

Local Authority

Local Authority
Waste Plan

Local Authority
Waste Plan

Local Authority

Local Authority
Waste Plan

Local Authority
Waste Plan

Local Authority

Local Authority
Waste Plan

Local Authority
Waste Plan

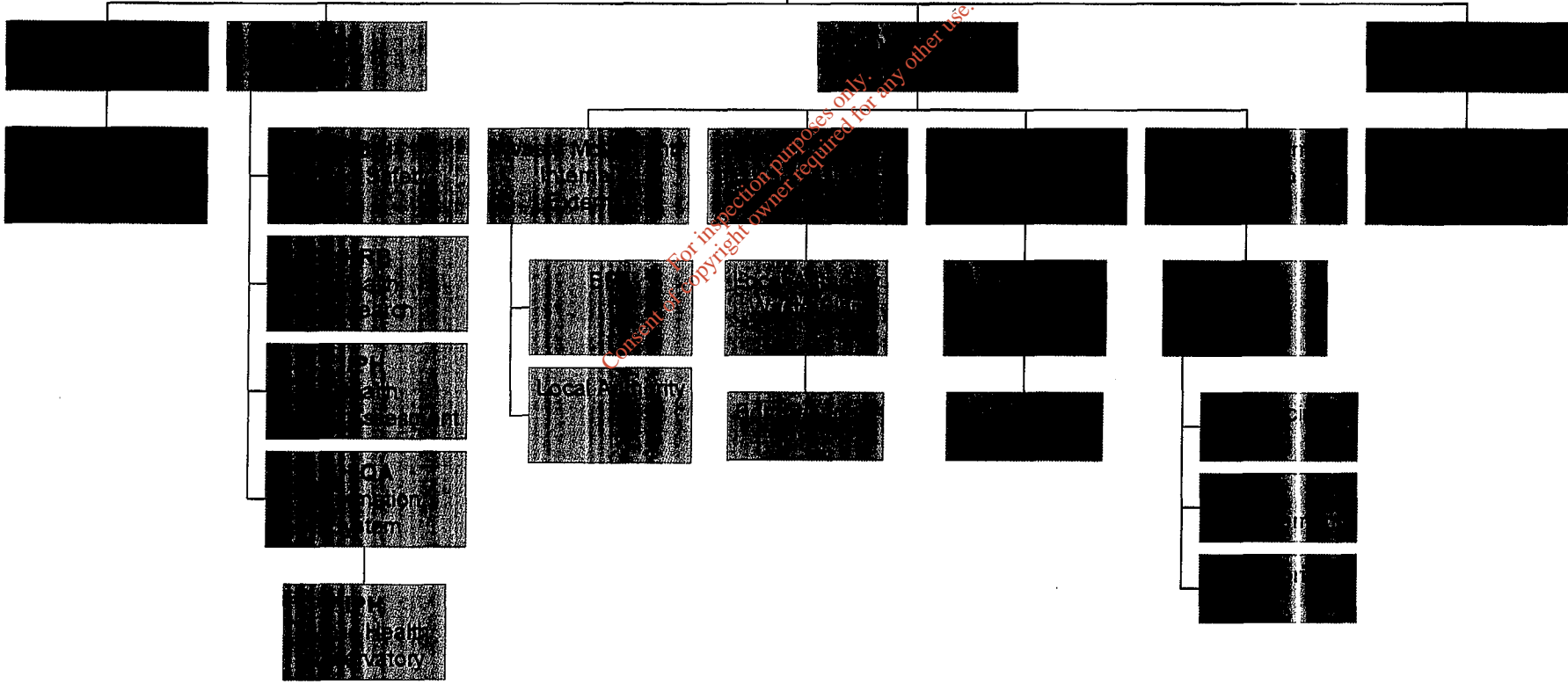
Local Authority

Local Authority

Local Authority

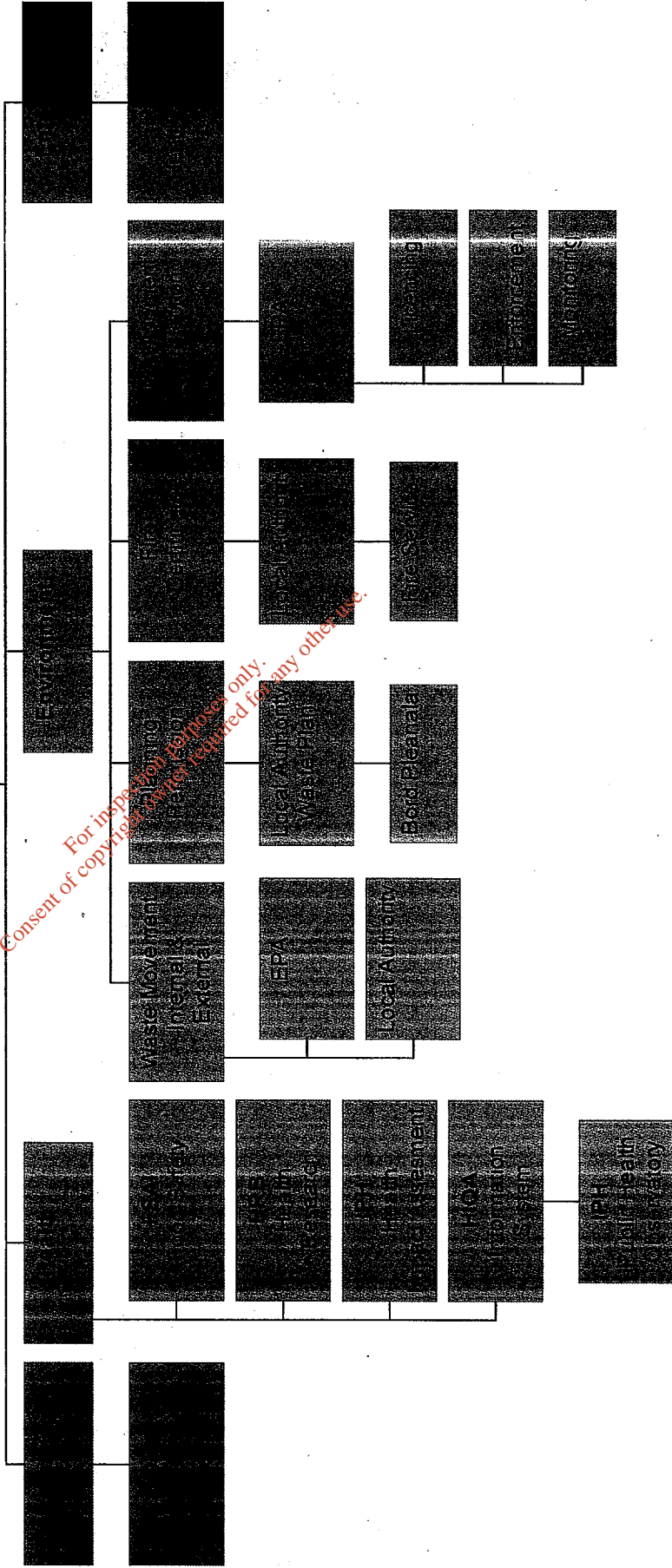
Consent of copyright owner required for any other use.
For inspection purposes only.

World Health Organisation
Public Health
Incineration & Site Selection
Air & Water Quality

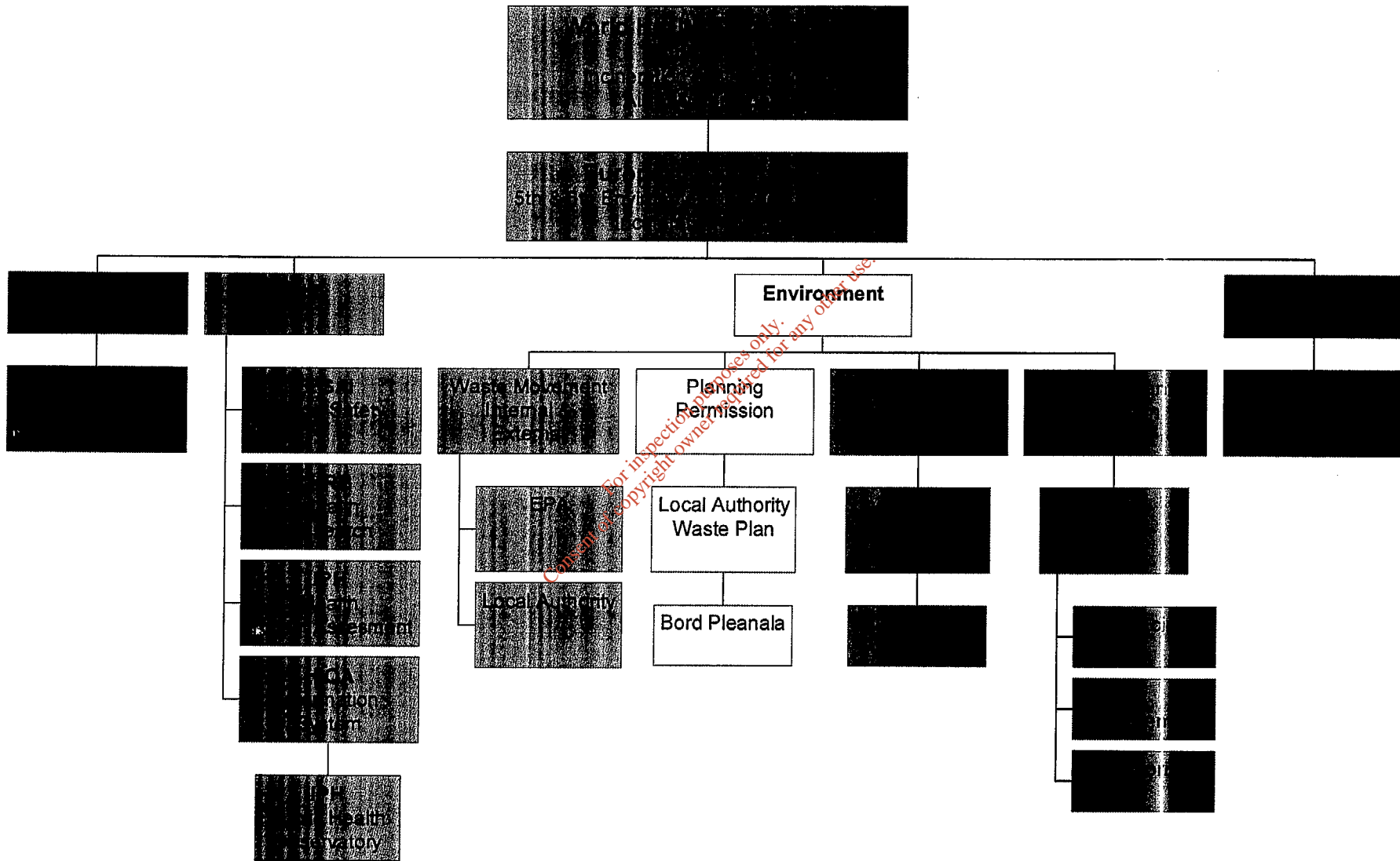


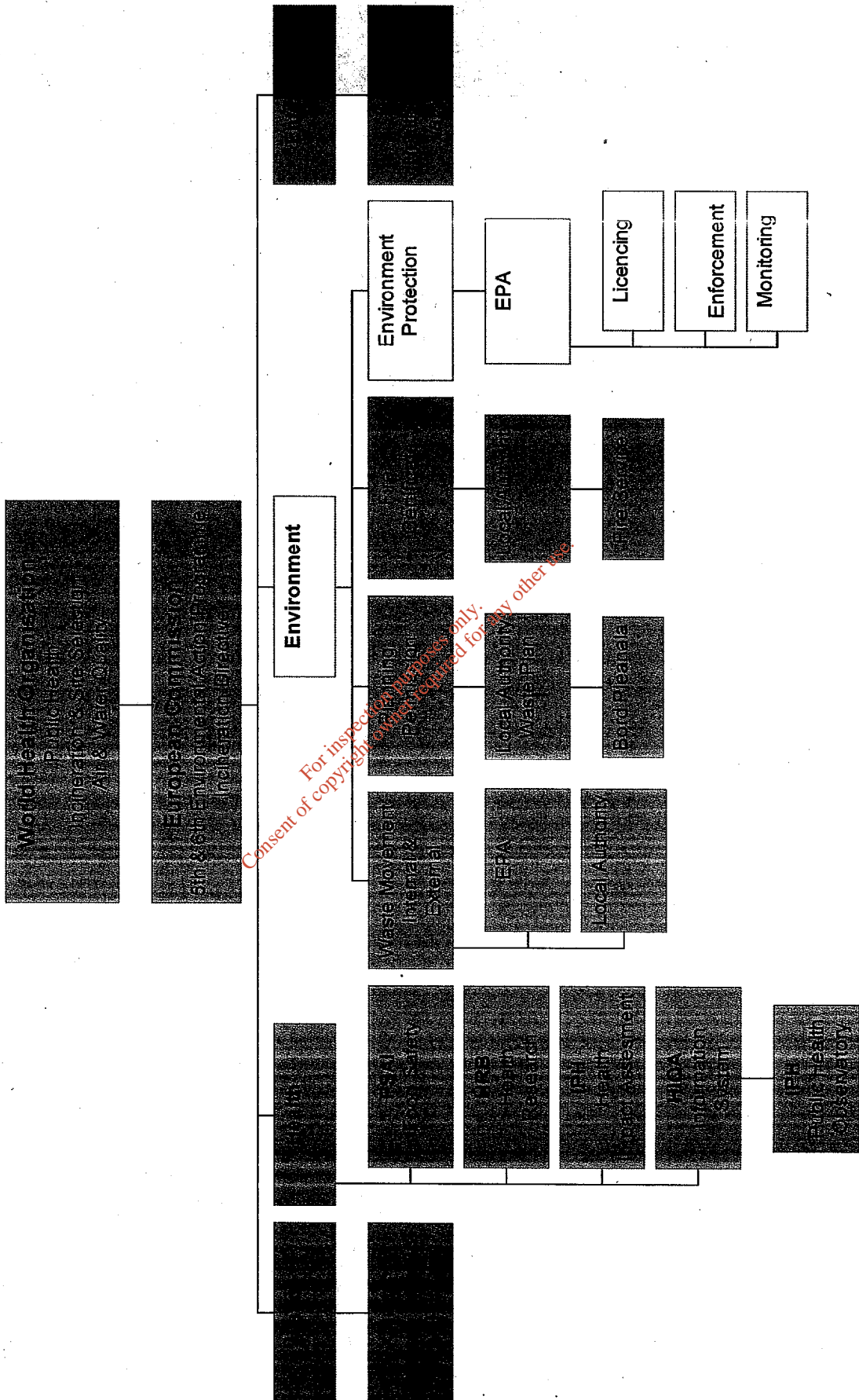
World Health Organisation
Environmental Health
Incineration & Solid Residue
Air & Water Quality

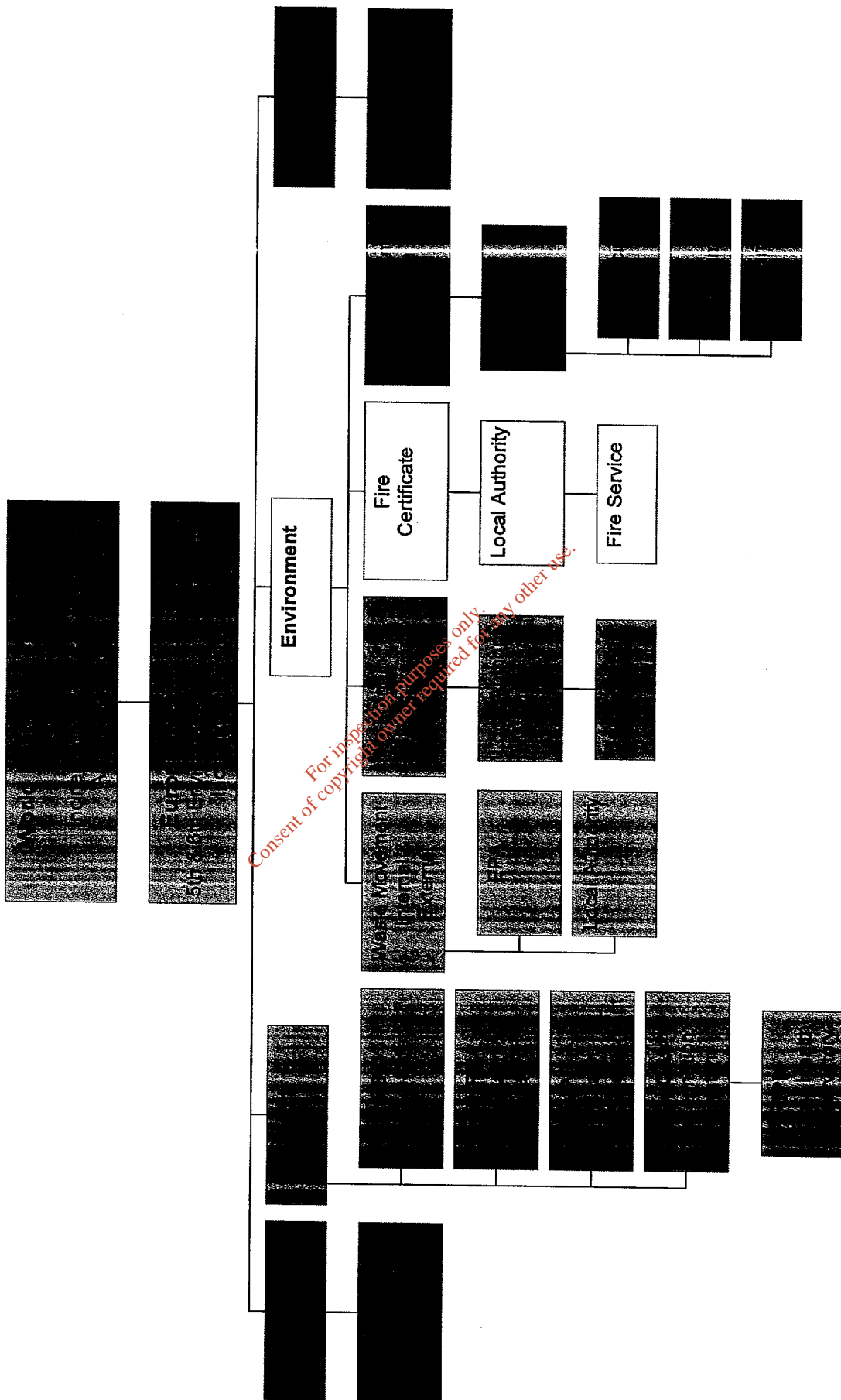
European Commission
5th & 6th Environmental Action Programme
Incineration Directive

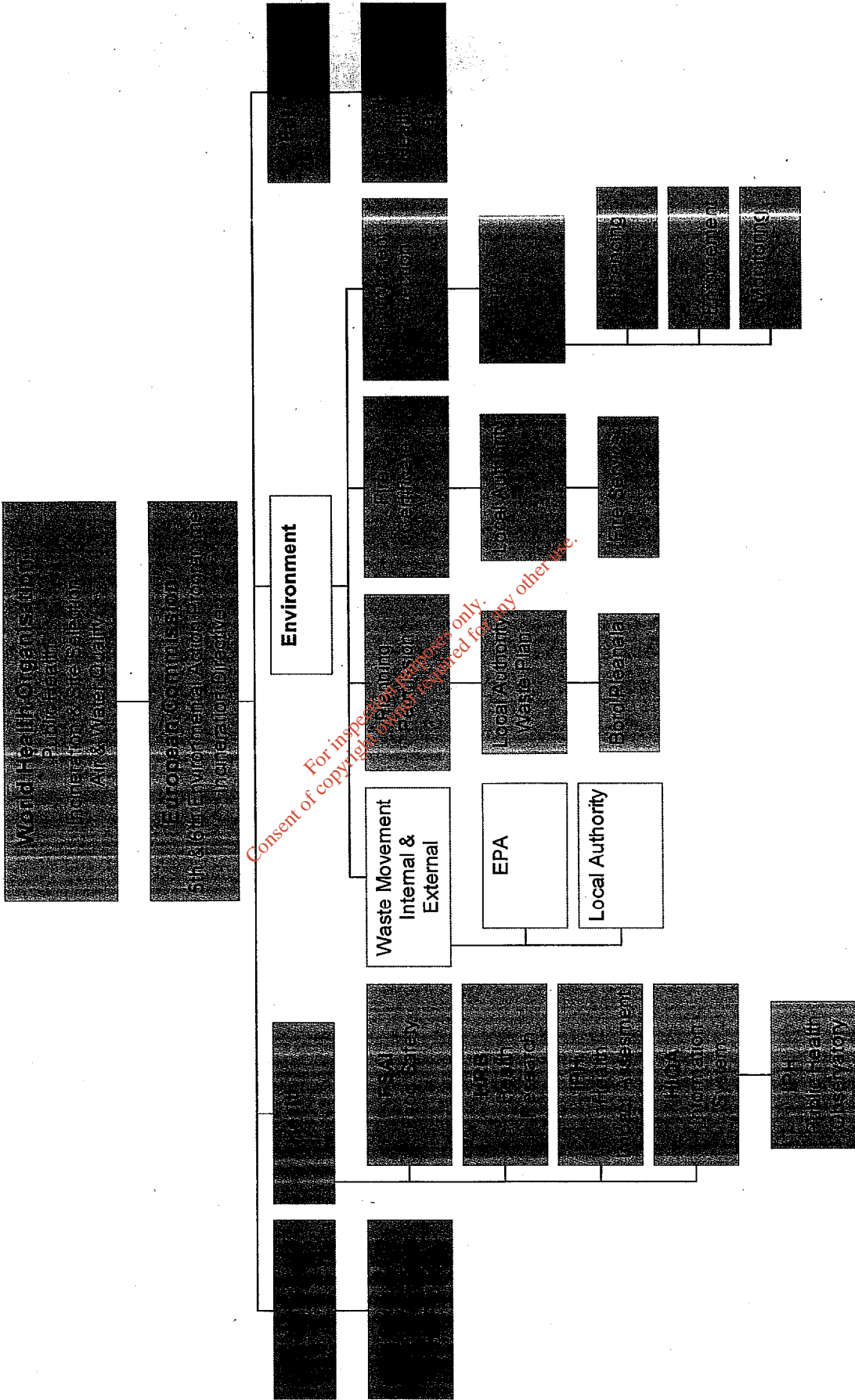


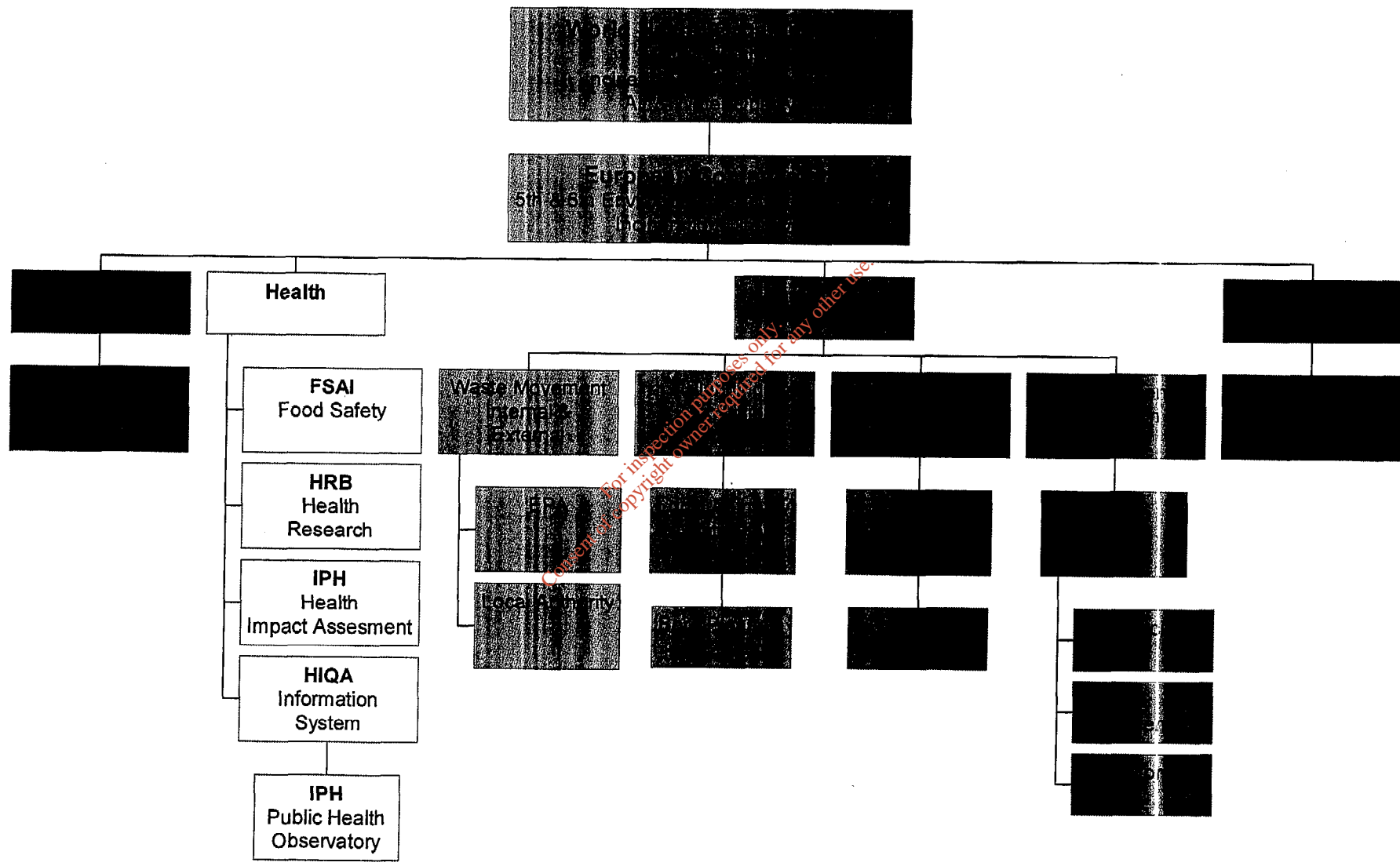
For inspection purposes only.
Consent of copyright owner required for any other use.



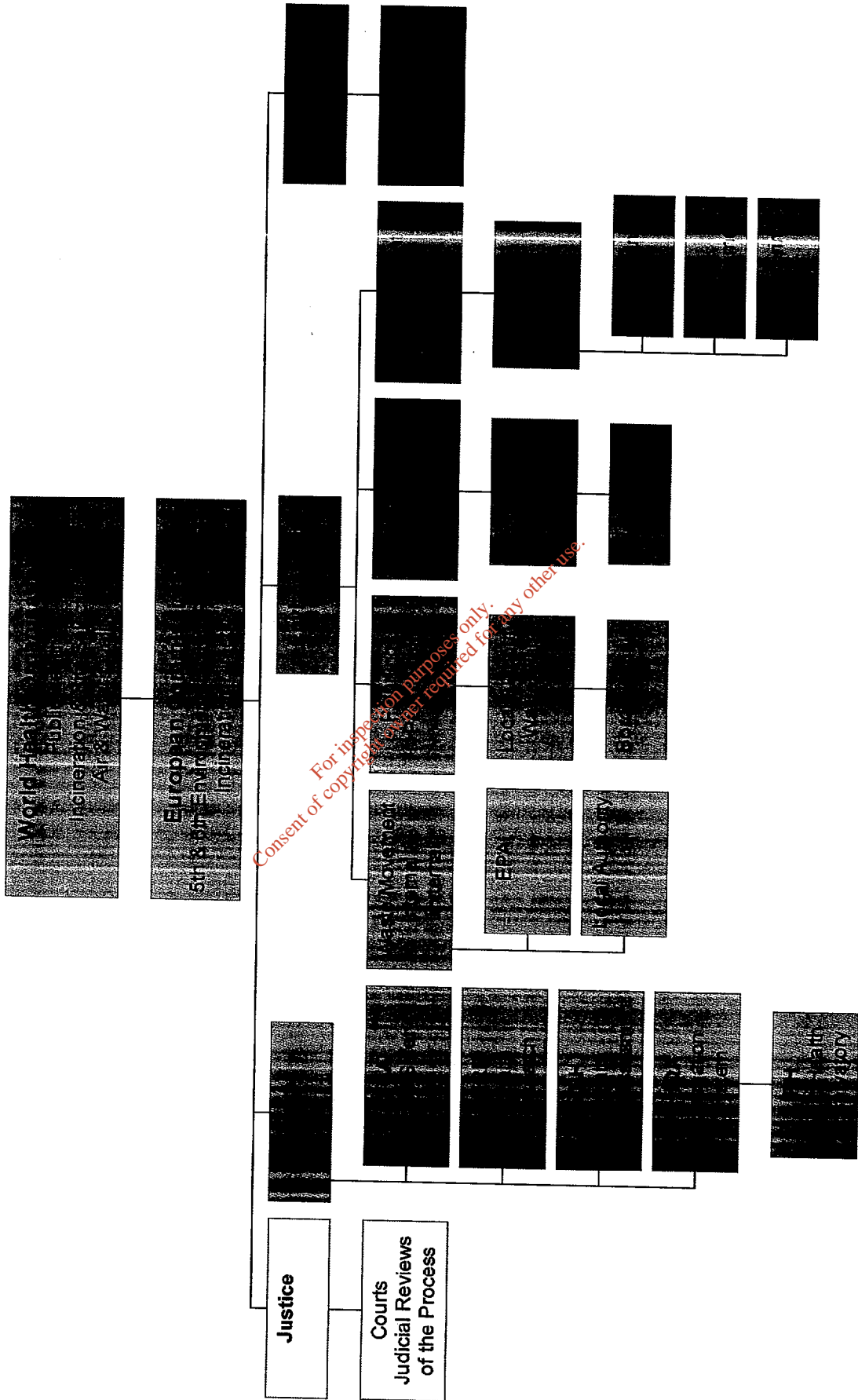


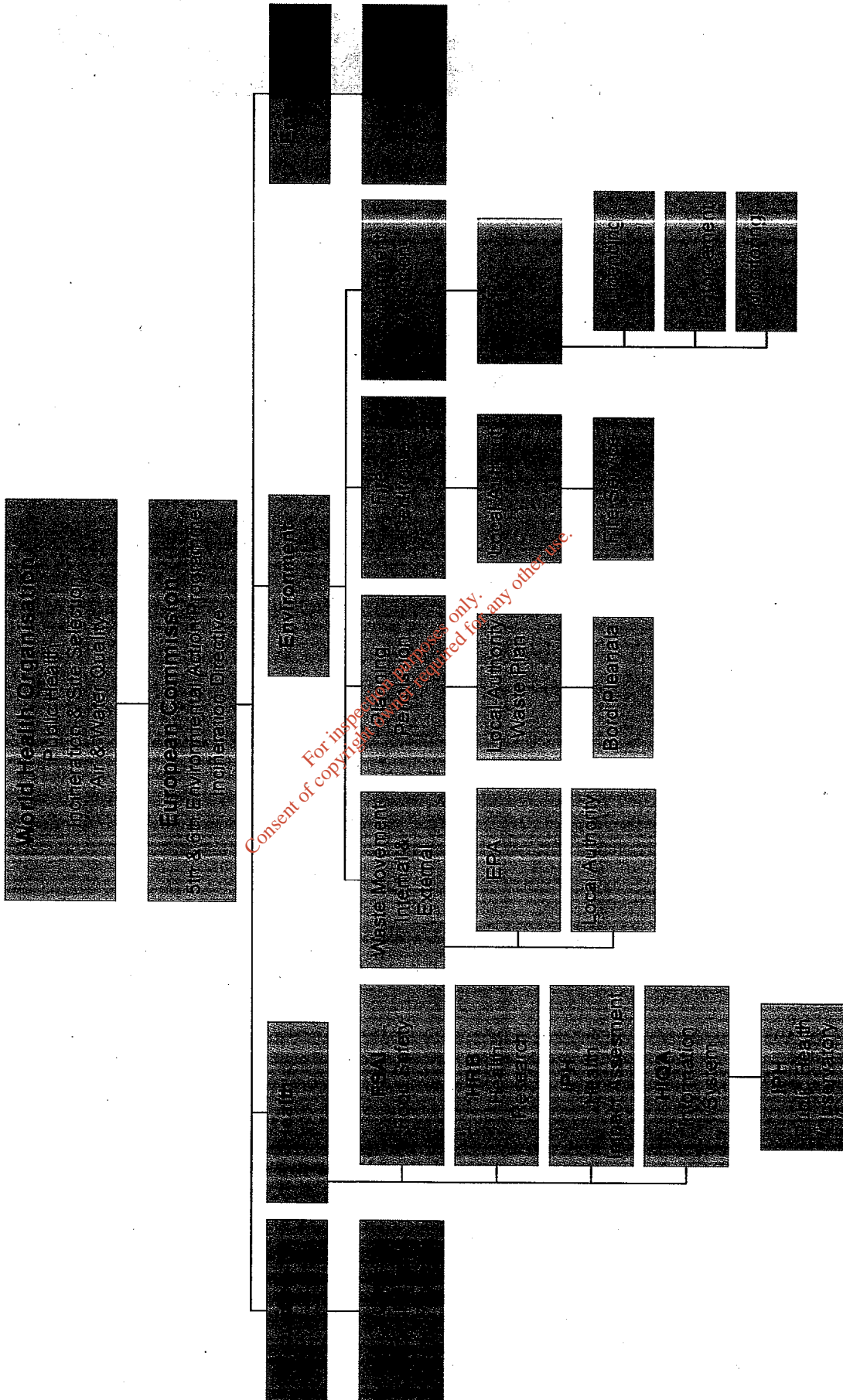












For information purposes only.
Consent of copyright owner required for any other use.

Conclusion

- Ireland has adopted an Integrated Waste Management Policy including all aspects of the Waste Hierarchy
- Incineration is growing in Europe
- Zero Waste will not solve our waste problems
- The company has the competency to operate our proposed facility
- Public Health is protected and the recommendations of the HRB report are being taken into account and acted on

