PROPOSED INCINERATOR NEEDS GUARANTEED CONSISTENT SUPPLY OF MSW FEEDSTOCKS HENCE DEFEATS RECYCLING, CAUSES CANCER, BIRTH DEFECTS, DEATHS WITH PROXIMITY TO BURNER

PEER REVIEWED REPORTS - incinerators KILL

Cancer mortality in towns in the vicinity of incinerators and installations for the recovery or disposal of hazardous waste

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Contamination of livestock due to the operation of a small waste incinerator: a case incident in Skutulsfjörður, Iceland, in 2010

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Background
In 2010 contamination by dioxins and dioxin-like PCBs was detected in milk and meat in the valley Engidalur situated at the bottom of a fjord (Skutulsfjörður) in North West Iceland. The valley is narrow and surrounded by high mountains resulting in prevailing calm weather. The contamination was traced to a small municipal waste incinerator operating in the valley. Annual agricultural production in Engidalur was modest (≈6 tons of meat and 45 tons of milk). The Icelandic Food and Veterinary Authority conducted a series of measurements examining the contamination and the results are reported in this paper.

Results
Earlier inspection of the waste incinerator had shown dioxin levels in fly ash of 2.1 ng I-TEQ/m3, which exceeded the EU maximum limit of 0.1 ng I-TEQ/m3. Late in 2010 routine inspection found 4.0 pg WHO-TEQ/g for PCDD/Fs and 7.4 pg total WHO-TEQ/g fat in one milk sample from a farm in Engidalur; levels exceeding the EU maximum limits of 3.0 and 6.0 pg WHO-TEQ/fat for dairy fat, respectively. These results were confirmed in an additional milk sample. Elevated levels exceeding the maximum limits were also observed in one out of two beef samples collected from the farm (4.7 pg WHO-TEQ/g for dioxins and 12.3 pg total WHO-TEQ/g fat). Elevated levels in lamb and ewe meat were also observed but concentration varied greatly, reflecting different migration routes of animals during summer grazing and different sources of hay used during winter. A composite sample of hay from Engidalur had levels of PCDD/Fs of 0.85 pg WHO-TEQ/g and 1.36 pg total WHO-TEQ/g; levels that were marginally, but not significantly, above the EU maximum limit of 0.75 pg WHO-TEQ/g and 1.25 pg WHO-TEQ/g, respectively.

In 2007, the Environment Agency of Iceland (EAI) measured emissions from waste incinerators. According to regulations of the European Commission, the executive arm of the European Union, maximum emission levels of dioxin should not exceed 0.1 ng/m3.
“The emission levels are measured per cubic metre in the exhaust from the incinerator rather than total emissions. As a result, an incinerator that burns more waste but has a lower emission measurement can emit more dioxin,” explains Sigridur Kristjansdottir from the EAI. However, in 2007, emission levels in Isafjordur were 21 times the maximum EC regulation level. In addition, concern has arisen in the small town of Kirkjubaejarklaustur, in South Iceland, where dioxin levels were recorded at 95 times the maximum exposure level in 2007. And in Vestmannaeyjar, an island just off South Iceland, the dioxin level was 84 times the maximum exposure standard.


Sint Niklaas waste incinerator Belgium
http://myweb.tiscali.co.uk/freeblackpark/sain/children.htm

Incinerators: The Effect on Children
By Dr J Thompson

The report on the Sint Niklaas incinerator states "we have dedicated this report to all the deceased children who died from cancer as well as the numerous children who have numerous serious health complaints caused by the waste incinerator in Sint Niklaas. A society that does not take care of its children is less than primitive.

This report, funded by the Belgian government, is the only complete study ever done on incinerators. Although the proposed incinerator at Colnbrook will have a lower dioxin output than that at Sint Niklaas, the fact that it would be nine times larger, will emit higher volumes of particulates and will foolishly be allowed to incinerate radioactive material gives little cause for comfort.

Children are more vulnerable to the pollutants produced by incinerators, breathing in more air than adults relative to their size, and are likely to be the first to suffer from adverse effects. The foetus and newborn are uniquely vulnerable (see below).

Cancer
The report on the Sint Niklaas incinerator showed that blood and glandular cancers appeared in children about 5 years after the incinerator started operating. This preceded the increase in adult cancers by 7 years. Adults cancers showed a five-fold increase over 20 years. Knox found a doubling of childhood cancers and leukaemias within 5km of municipal incinerators (2) greatly exceeding the risk around non-combustion urban sites.

Congenital Abnormalities
A recent large study by Dummer over a 37 year period showed that the incidence of spina bifida was 17% higher and heart defects 12% higher near incinerators (3).

Congenital defects of many kinds were found at Sint Niklaas (1). Orofacial defects were found to be more than doubled near an incinerator at Zeeberg, Amsterdam (4). Dolk found a 33% higher incidence of birth defects, (86% higher neural tube defects, 50% higher incidence of cardiac septal defects) and a higher risk of chromosomal abnormalities within 3 km of municipal waste sites (5). The same pattern of increased congenital defects (12%) with a higher excess of neural tube defects (54%) was found in a study of ethnic minorities near waste sites in the US (6). Chromosomal and other major anomalies (facial clefts, megacolon, renal dysplasias) were found in a study of 70 incinerators in France.

Asthma and Respiratory Disorders
Incinerators produce vast amounts of fine particulates. Particulate pollution has been shown to increase the incidence of asthma in children (7,8), to reduce immunity (9,10,11), to be associated with higher rates of ear, nose and throat infections (7), increased frequency of respiratory symptoms (12,13), increased duration of infections (14), loss of time from school (16) and significant permanent reduction in peak flow from fibrosis with progressive declines in respiratory function (16,17). The greatest declines have been shown to occur in those who spend more time outdoors. Similarly with asthma the greatest effect is on children who do outdoor sports who have a threefold increase (compared to no increase in unpolluted areas) (18).

Other Illness
The Sint Niklaas study showed an excess of autism, hyperactivity, allergies, asthma, repeated infections and congenital defects. Data from this country shows increased autism rates near incinerators: being 1 in 85 near the Edmonton incinerator and 1 in 30 in parts of Birmingham sandwiched between two incinerators (Tysley and Dudley). Average in UK 1 in 180.

Effects on the Foetus
Chemicals and pollutants that the mother is exposed to during her lifetime will build up in her fatty tissues and in pregnancy these will be actively transported across the placenta into the tiny body of the foetus. Foetuses have virtually no protection against toxic chemicals as they have no fat stores. They store them in the only fatty tissue they have: the brain and nervous system. During the first 12 weeks of life the foetus will be affected by miniscule amounts of chemicals, particularly oestrogenic chemicals and these can be neurotoxic and lead to behavioural disorders (19). Small amounts of PCBs and dioxins can affect neurological development, sexual development of the brain and cause altered expression of genes (20) and alter thyroid status (19,21). These chemicals can affect immunity and be associated with high incidences of middle ear infections and recurrent respiratory infections (22).

Breast Feeding
The situation with breast feeding is already extremely serious as it is known that 90% of samples contain about 350 chemicals. This is higher in industrialised areas showing that inhalation of toxic substances is important (23). The daily dose of toxic substances taken in from breastfeeding can be 50 times greater than that taken in by an adult (24). This has been shown to affect neurological development (25). Sadly breastfeeding is one of the few effective ways of reducing the mother’s toxic load. There is no question that an incinerator would add to this already dangerous chemical load and there is no justification for this as safe technology exists for waste disposal.

The Next Generation
It has been clearly demonstrated in animal studies that chemicals can cause cancer in not only the exposed animals but also its offspring for several generations (26). We now know that both chemicals and heavy metals can form DNA adducts and these can be passed on to the foetus.

This is a very worrying scenario and demonstrates the importance of the precautionary principle and avoiding further pollution.


Infant Mortality rates in Electoral Wards Around Kirklees Incinerator
(2004 - 2008 ONS Data)

Cancer incidence near municipal solid waste incinerators in Great Britain.
P. Elliott, G. Shaddick, I. Kleinschmidt, D. Jolley, P. Walls, J. Beresford, and C. Grundy

Abstract

By use of the postcoded database held by the Small Area Health Statistic Unit, cancer incidence of over 14 million people living near 72 municipal solid waste incinerators in Great Britain was examined from 1974-86 (England), 1974-84 (Wales) and 1975-87 (Scotland). Numbers of observed cases were compared with expected numbers calculated from national rates (regionally adjusted) after stratification by a deprivation index based on 1981 census small area statistics. Observed-expected ratios were tested for decline in risk with distance up to 7.5 km. The study was conducted in two stages: the first involved a stratified random sample of 20 incinerators; the second the remaining 52 incinerators.

Over the two stages of the study was a statistically significant (P<0.05) decline in risk with distance from incinerators for all cancers combined, stomach, colorectal, liver and lung cancer. Among these cancers in the second stage, the excess from 0 to 1 km ranged from 37% for liver cancer (0.95 excess cases 10^-5 per year) to 5% for colorectal cancer. There was evidence of residual confounding near the incinerators, which seems to be a likely explanation of the finding for all cancers, stomach and lung, and also to explain at least part of the excess of liver cancer. For this reason and because of a substantial level of misdiagnosis (mainly secondary tumours) found among registrations and death certificates for liver cancer, further investigation, including histological review of the cases, is to be done to help determine whether or not there is an increase in primary liver cancer in the vicinity of incinerators.

70% BY WEIGHT OF WHAT IS BURNED IN AN INCINERATOR IS THRUST INTO THE AIR
30% BY WEIGHT OF WHAT IS BURNT REMAINS AS BOTTOM ASH (CLINKER) OF WHICH APPROX 10% IS HIGHLY TOXIC FLY ASH COLLECTED FROM THE BAG HOUSE AND FLUES – THE FLY ASH CONTAINS ALL KINDS OF PATHOGENIC TOXIC METALS AND TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin : DIBENZO DIOXINS /FURANS)
THE ABOVE REPORTS ARE RANDOM EXAMPLE SHOWING THE TOXICITY OF (EVEN MODERN DAY) INCINERATORS MANY MORE PEER REVIEWED REPORTS ARE AVAILABLE AND EASILY ACCESSIBLE ONLINE

PM2.5, PM1 ULTRAFINE EMISSIONS CANNOT BE CAUGHT BY EVEN THE LATEST TECHNOLOGY SCRUBBER/PRECIPITATOR
**MOVING GRATE INCINERATOR** – DEFEATS RECYCLING – EXPENDS FAR MORE ENERGY THAN RECYCLING – POLLUTES THE AIR – CAUSES BIRTH DEFECTS, CANCERS AND DEATHS WITH PROXIMITY TO THE EMISSIONS

30% OF WHAT IS INCINERATED BY WEIGHT REMAINS AS BOTTOM ASH OF WHICH 10% IS FLY ASH

http://news.bbc.co.uk/2/hi/uk_news/england/1629031.stm

ASH NEEDS TO BE SENT TO LANDFILL AND THE FLY ASH TREATED BY ENCAPSULATING IN NON LEACHABLE CEMENT

HK GOVERNMENT TELLS US WE NEED TO EXTEND OUR LANDFILLS (SINCE INCINERATORS ARE INSEPARABLE FROM LANDFILLS)

HK FOOD WASTE CONTAINS 90% WATER (WET MARKET WASTE) WITH A CALORIFIC VALUE OF <2MJ/KG BUT WE NEED >7MJ/KG FOR COMBUSTION - SO RECYCLABLE MATERIALS MUST BE ADDED TO CO-COMBUST AND ADDITIONAL ENERGY USED TO BURN THE WATER – WHEN IN FACT OUR SEWERAGE SYSTEM COULD HANDLE OUR DAILY (PULPED) FOOD WASTE IN MINUTES

SO THE NEXT OBVIOUS ENB REQUIREMENT IS: MAN MADE EXPENSIVE MEGA ISLANDS IN THE SEA AS OUR NEW ASH LAGOONS

**Toxic Fly ash treatment**

Fly ash silo

Flue gas scrubbing effluent

Extractor stages 1 to 3

Make up water

Washed ash

Vacuum band filter

Waste water treatment

Residue
Pros and Cons of incineration

**PROS**
- Worked for cavemen

**CONS**
- A backward remnant of former societies
- Kills people, both adult, child and newborn
- Causes cancer, birth defects, leukaemia, asthma and many other serious diseases
- Sends 70% of what is thermally converted into the air carrying toxic pathogenic heavy metal bearing RSP’s such as cadmium, lead, TCDD – precipitators and bag houses cannot catch PM2.5 and PM1 ultrafine RSPs which are carried by the winds
- Requires landfilling of remaining 30% by weight bottom ash and highly toxic fly ash that must be treated to prevent leachate
- Creates massive amounts of CO2 and other toxic emissions
- Negates recycling since it must have a constant reliable feedstock supply
- Mass burn moving grate units burn everything without any recycling of mixed wastes

**WHAT SHOULD THE HKG ENB BE DOING INSTEAD OF GOING BACKWARDS?**

http://www.zerowaste.lacity.org/home/index.html

Los Angeles already has a 75% recycling rate but they challenge themselves to become a ZERO Waste society

**ZERO WASTE PLAN**

Solid Waste Integrated Resources Plan

Goals Identified in Early Outreach Meetings

Community Organizations
- Zero waste is the major guiding principle. Everything stems from here.
- Focus on protecting the environment. Everything else such as protecting neighborhoods, eliminating greenhouse gases, creating green jobs should follow.
- Zero waste is not truly achievable, but is a goal to aim for.
- Los Angeles’ Zero Waste Plan will create more jobs. These jobs will encourage people to work in the waste shed in which they live.
- Zero waste is not in the vocabulary of Chinatown residents. They view cleanliness and prioritize family and home. They see managing trash and recyclables as their government’s responsibility.
- Communities will be clean. Rich, poor, or in between, people highly value the quality of life of their neighborhoods.
- Los Angeles will be a zero waste city and have waste-to-energy projects, but we will make sure that equity – environmental justice – is maintained so that the wealthy and poor communities share the burdens and the benefits.
- Equity is of utmost importance. Los Angeles should be a city where diversity is valued; that it is not a city of “haves” and “have-nots”.
SWIRP plans will be developed from the regional (individual waste shed) perspective.

- Develop green jobs and hire young people. Create pride in the community.
- Value resources; conserve water; educate people to conserve natural resources and recycle more.
- Good management of solid resources will produce opportunities for cost reduction, safer neighborhoods, and good health.
- Integrated planning will take into account all environmental and sustainability issues. All City sustainable and environmental issues should be integrated and not separated from each other. This includes City projects and programs.
- People will recycle and become green as a way of improving the world for their children.
- Twenty years from now, Los Angeles will have blue skies, more public transportation, and less traffic.
- All recyclable products will be recycled.
- Companies will become green and act as role models for their employees.
- Corporate buildings will recycle.
- Los Angeles will combine education and enforcement to get people to do their part to recycle; reduce waste, stop scavenging, and keep neighborhoods and waterways clean.
- Waste reduction will start with manufacturers. They will produce products that don’t have to be replaced so frequently. Upgrades – rather than replacement – will be easier.
- Manufacturers will design, manufacture and sell environmentally-friendly products.
- Landfills will take only inert materials. Convenience materials should be recyclable and reusable.
- We will reduce our dependence upon landfills.
- Los Angeles will be a more sustainable city and recycling will be extended to multifamily housing and the commercial sector.
- Recreational areas will not be converted to industrial use areas.

2

- Solid resources decisions will prioritize fairness and equity.
- Good plans will be backed up with strong enforcement.
- Recycling will be maximized and the amount of refuse that goes to alternative technology will be minimized, unless that technology is environmentally safe.
- People will be educated about the impacts of excessive trash and encouraged to compost. Los Angeles will seek new uses of byproducts to reduce and offset collection costs.
- Commercial recycling will be mandated.
- Los Angeles will encourage the establishment of small, local processing centers and will convert 80 to 90% of trash into energy or reuse.
- All yard trimmings will be processed and reused locally.
- Everything from processing to end uses will be managed locally as much as possible.
- Power generation will come from waste products that have no alternative uses.
- Clean-burning incinerators will be used for waste-to-energy systems.
- Packaging will be reduced at the source.
- Government services will be paperless.
- Businesses and homes and homes will be paperless too.
- All landfills will harness methane for energy.
- Residents will take for granted (automatically think) that very few materials belong in the black bins.
- Cities and county agencies will work together to make implementation of good ideas easy and sensible.
- Housing will be affordable.
- Los Angeles will have good, effective drug programs and alcohol programs.
- Trash will be reduced to minimal amounts. Inerts will be shipped out of the urban area by rail.
- Certain areas of the city that have had more than their fair share of trash-or recyclingrated facilities will not be sites for future solids handling facilities. Sun Valley, Granada Hills, and the Lancer site were mentioned specifically; but there are more communities that feel this way.
- We need to invest in future technologies, even if they are expensive today.
- We will revamp our current trash collection mentality and get away from the landfill mentality.

Environmental Organizations
Protect the environment and individual health. All SWIRP guiding principles stem from here.
Los Angeles will be a leader in sustainability.
We will look at the total picture regarding waste and pollution, and not be shortsighted. We will not take one problem – like waste – and convert it into another problem – like air pollution.
Remove the politics of trash and focus on “leave the earth better than how you found it by conserving natural resources.”
SWIRP will reduce waste and address the toxic stream source.
The 20 year plan will focus on the big picture, not just costs.
Solutions will integrate big picture issues such as reducing the need for air conditioning, pumping water, etc.
Markets will be created for materials that cannot currently be recycled.
Waste will be managed locally.
Jobs will be created locally.
Fewer trucks with trash or recyclables will be on Los Angeles’ streets.
There will be more green jobs and more emphasis on sustainability.
For every job at a landfill, you could create 75 new jobs at a Resource Recovery Park.
Resource Recovery Parks will be the #1 priority.
SWIRP will focus on waste reduction; not just recycling or alternative technology.
Garbage will be treated as an economic concept. It is made up of resources with value to create energy or reused in other ways.

More recycling will allow us to use less virgin materials and save natural resources.
People will buy “recycled”.
SWIRP will consider the 2% solution for achieving 70 % and higher diversion rates. Big “magic bullets” are not the solution. Pursue achievable and incremental wins. Small decentralized solutions will avoid some of the community impacts and environmental justice issues that work against successfully moving recycling rates upward.
Los Angeles will establish a bureaucracy that supports local solutions. This may involve establishing a non-profit structure to support emerging micro-businesses.
The Mayor’s Carbon Plan will help guide SWIRP goals and guiding principles. Find common ground.
We will develop the concept of “sufficiency.” People will recapture their autonomy.
The responsibility for waste management will shift from focusing on consumers to everyone involved, including the product producers, distributors, the jurisdiction and consumers.
We will look at the total life-cycle of products – cradle to cradle.
People will feel personal responsibility for their actions. They will realize they are part of the earth’s environment and feel guilty when they do not do the right thing.
Los Angeles will be litter-free; will have more green space; will have smart planning and development that includes energy efficiency, environmentally responsible waste management, and water-wise use.
Los Angeles will have much better public transportation that is used by more people.
Recyclable products will be reused/recycled/composted before they are used for energy.

Business Organizations
The restaurant industry will be green in 10 years.
Food packaging will be safe, environmentally responsible, and cost effective.
We will provide more education about what can be recycled.
Cities and counties will pool public education dollars to do more, high-level advertising campaigns together.
Los Angeles will have less graffiti.
We will pursue alternative energy at lower costs. We will place solar panels on government buildings. City and government will be a model for the public by utilizing more alternative energy sources.
We will design for the environment.
Building owners will provide recycling and renewable energy options for tenants.
The City’s Climate Change Action Plan will reduce greenhouse gases by 35% by 2030.
Cost-effective and convenient food waste composting will be available.
Sunshine Canyon Landfill will continue to be used until it fills because it is the cheapest and best option available to Los Angeles. At the same time, develop options to deal with the closure of a filled Sunshine Canyon, such as alternative technology facilities.
Private Hauler and Recyclers
- We will have a holistic approach: preservation of resources, reduction of pollution, saving the environment, being cost effective.
- Zero waste is not the answer. Remember, the most important thing to the homeowner and business is that they don't want stuff sitting at the curb.
- Los Angeles will recognize and support the efforts of the private sector, ensuring future capacity by expanding MRFs and transfer stations to include both new materials and increased volume.
- The City will drive the infrastructure by streamlining siting, permitting, and providing incentives for organics and food waste recyclers.
- The aesthetics of a green city will include trees, open spaces, parks, and an open and welcoming approach to green building and sustainable design.
- Trusting and believing comes from action. People will see the results from their feedback.
- We will create local jobs that support and promote a cleaner and more sustainable environment.
- Green jobs will be created in accounting and design (measuring greenhouse gases, measuring carbon credits, designing non-polluting facilities).
- MRF First. All collected solids will be MRF’d before they go to a landfill or conversion technology facility.
- Conversion technology will be pursued with vigor.
- We will explore methods to share cost savings or revenue with neighborhoods that host facilities or show superior diversion.
- We will have more drop off centers to service residents.
- Regional collaborations will be pursued.
- Recycling will be mandatory for both residential and commercial.
- Recycling will not be mandatory.
- We will have a visible, meaningful recognition program for companies that aggressively recycle. To reach zero waste, all recycling initiatives will be mandatory.
- Local governments will follow their own policies. Even though the California Integrated Waste Management Board holds local governments responsible for meeting AB939, these requirements were only recently implemented by state facilities. This did not send the appropriate message.
- We will have a conversion technology strategy as developed by RENEW LA.
- We will develop a responsible climate action plan, including moving away from large centralized facilities to more decentralized waste shed-based infrastructure.
- Los Angeles development standards will go beyond what we have now for MRFs and transfer stations. The new ecological footprint will have to be quieter, cleaner, more physically attractive and buffered from neighborhoods. The City will have to pay more to meet these standards.
- We will develop a blue ribbon advisory group to advise City leadership on SWIRP.
- We will create trade incentives to encourage manufacturing in urban areas subject to industrial closed-loop economy standards. Low emissions and water recirculation will cost more.
- Organics generated in Los Angeles will be utilized by composting and electricity.
- We will focus on the value of recycling as it pertains to the reduction of greenhouse gases.
- Waste haulers and recyclers will be part of the solution.
- Recycling programs and facilities will promote environmental protection and benefit the economy.
- We will support conversion technology, but not at the expense of recycling.

Government Partners
- We will have a regional approach and will form partnerships between cities to achieve zero waste.
- We will achieve zero waste by 2020.
- Cities will take care of their own solid waste problems without negatively impacting other communities.
- We will have the political will to create a different paradigm.
- The proven simple technologies used in Europe that offer fully assembled turnkey systems will be pursued with vigor.
- Front-end separation of wastes will be maximized so that what is left can be handled with alternative technology that produces clean energy and reduces greenhouse gas emissions.
- Conversion technology is the answer to the region’s problems.
**What We've Heard So Far**

Regional Workshops Fall 2007

<table>
<thead>
<tr>
<th>Region</th>
<th>Group Goals and Objectives</th>
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<tbody>
<tr>
<td>North Central</td>
<td>Research the threat, prevent additional stations, lessens its impact, education, awareness, and community involvement.</td>
</tr>
<tr>
<td>South Central</td>
<td>Collecting data for educational purposes, identifying areas of need, investigating potential sites.</td>
</tr>
<tr>
<td>South Valley</td>
<td>Identify best practices in California and other states, determine what the area needs, and create a plan.</td>
</tr>
<tr>
<td>East Valley</td>
<td>Establish baseline data for future reference, train the staff, and develop a solid foundation.</td>
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**Results of Early Workshops**

- **Research:**
  - Gathered data from neighboring states and cities.
  - Identified best practices in California and other states.

- **Data Collection:**
  - Established baseline data for future reference.
  - Trained staff,

**Lo Que Hemos Escuchado Hasta Ahora**

Informe Periodico del Octubre 2007

Un elemento importante del Plan de Cero Desechos para Los Ángeles es conocer a los sin hogar y los que viven en la calle. La Agencia de Servicios de la Ciudad ha establecido una serie de reuniones con líderes y líderes de la comunidad para entender sus necesidades. En las reuniones, los líderes destacaron la importancia de la educación y el apoyo de los residentes para la reducción de desechos.

**Resultados de Visitas**

- **Encuestas:**
  - Se realizaron encuestas a los residentes para determinar sus necesidades y preferencias.

- **Observaciones:**
  - Se realizaron observaciones durante las visitas para identificar áreas de mejora.

Para más información sobre el Proyecto de Cero Desechos, por favor contactar con la Agencia de Servicios de la Ciudad.

For more information on upcoming workshops or a copy of the plan, contact

Assistant Project Manager of the City of Los Angeles
213-473-4285 or email: sanchez@cityofla.org

On www.zerowaste.lacity.org

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**January 2008**

**NEWSLETTER**

**CONTINUOUS DOWN TO ZERO WASTE PLAN**

A Solid Waste Integrated Resources Plan

**Letter from the City of Los Angeles**

The City of Los Angeles wishes to thank the stakeholders throughout the city who are participating in the Zero Waste Plan, also known as the Solid Waste Integrated Resources Plan (SWIRP). Our involvement in this important effort is crucial to developing a plan that will benefit the City's waste management needs now and in the future. To that end, a big thank you to all the stakeholders and City of Los Angeles employees who are working together to achieve a collective goal.

One of the City's goals is to divert 70% of trash from landfills by the year 2015. This is a daunting task, but it is doable. During past years, the Department of Sanitation (DOS) has implemented programs that have reduced the City's waste generation by 20%.

**February 2008**

**BOLETIN INFORMATIVO**

**CONTINUACIÓN HASTA CERO PLAN DE DESECHOS**

Plan de Recursos Integrados para Desechos Sólidos

**Carta de la Ciudad de Los Ángeles**

La Ciudad de Los Ángeles desea agradecer a todos los organismos de la comunidad que han estado participando en el Plan de Cero Desechos, también conocido como el Plan de Recursos Integrados para Desechos Sólidos (IRP). Su participación es esencial para desarrollar un plan que cumpla con las necesidades de reducción de desechos. Es importante que todos trabajemos juntos para lograr este objetivo.

La ciudad de Los Ángeles tiene como objetivo reducir el 70% de su basura a las plantas de tratamiento para el año 2015. Aunque es un desafío, es posible realizarlo con la cooperación de todos los organismos involucrados.

El Departamento de Recursos Integrados para Desechos (DOS) ha implementado programas que han reducido la generación de residuos en un 20% durante los últimos años.

**June 2008**

**Boletín de Información**

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Plan de Recursos Integrados para Desechos Sólidos

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La ciudad de Los Ángeles tiene como objetivo reducir el 70% de su basura a las plantas de tratamiento para el año 2015. Aunque es un desafío, es posible realizarlo con la cooperación de todos los organismos involucrados.

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