

# Memorandum



CITY OF DALLAS

DATE October 10, 2008

TO Members of the Transportation and Environment Committee:  
Linda Koop (Chair), Sheffie Kadane (Vice Chair), Jerry R. Allen, Carolyn R. Davis, Vonciel Jones Hill, Angela Hunt, Pauline Medrano and Ron Natinsky

SUBJECT Plastic Bag Policy Presentation

Attached are the presentation materials related to the "Single-Use Plastic Shopping Bag" briefing scheduled on the October 13, 2008 Transportation and Environment Committee agenda.

Please feel free to contact me if you need additional information.

A handwritten signature in cursive script, appearing to read "Jill A. Jordan".

Jill A. Jordan, P.E.  
Assistant City Manager

## Attachment

C: Honorable Mayor and Members of the City Council  
Mary K. Suhm, City Manager  
Thomas P. Perkins, Jr., City Attorney  
Deborah A. Watkins, City Secretary  
Craig Kinton, City Auditor  
Judge C. Victor Lander  
Ryan S. Evans, First Assistant City Manager  
Ramon F. Miguez, PE, Assistant City Manager  
A. C. Gonzalez, Assistant City Manager  
David O. Brown, Interim Assistant City Manager  
David K. Cook, Chief Financial Officer  
Jeanne Chipperfield, Director, Budget and Management Services  
Edward Scott, Director, Controller's Office  
Frank Libro, Public Information Office  
Helena Stevens-Thompson, Assistant to the City Manager  
Eric Griffin, Interim Director, Office of Environmental Quality



# Single-Use Plastic Shopping Bags

Presentation to the Transportation and Environment Committee

October 13, 2008



## Presentation Overview

- Restate the City of Dallas' Environmental Policy
- Discuss single-use plastic bag impacts on the environment
- Propose approach for reducing consumption of single-use plastic bags in Dallas

## City of Dallas Environmental Policy

- The Dallas City Council charged the City to promote a clean, safe, and healthy environment by approving the City's Environmental Policy on January 26, 2005
- The policy expresses several commitments including:
  - An intent to meet or exceed all applicable environmental laws and regulations
  - Continual improvement of our environmental performance
  - ***Prevention of pollution at its source***

3

## Single Use Plastic Bags

- Definition: a single use polymer carry bag provided or utilized at the retail point of sale for carrying and transporting retail goods.
- Made from oil: it takes about 430,000 gallons of oil to produce 100 million plastic bags, and the U.S. goes through 380 billion of them a year.
- Translates to 1.6 billion gallons of oil to manufacture
  - 1.6 billion gallons of oil equates to 38 million barrels of oil; at \$100 a barrel, that amounts to \$3.8 billion

4

## Single Use Plastic Bags...

# Characteristics

- Made from one of three basic types:
  - high-density polyethylene (HDPE),
  - low-density polyethylene (LDPE), or
  - linear low-density polyethylene (LLDPE)
- HDPE - High Density Polyethylene (un-pigmented films have opacity, crinkle to touch, low stretch, tear easily)
  - Most grocery bags, pharmacy, farmer's market
  - T-shirt bags
  - Bags with sealed air for packaging (e.g., air cushion)



5

## Single Use Plastic Bags...

# Consumption

- Although given away “free” there are hidden costs
  - Passed on to the consumers as purchase price - cost to households of \$10 to \$15 per year is added to the price of goods that they purchase.
  - Environmental externalities
    - Ends up in the land fill
    - Clogs storm drains
    - Litters neighborhoods and roadways
    - Kill at least 100,000 birds, whales, seals and turtles every year
    - If buried in landfills, they block the natural flow of oxygen and water through the soil.
    - If burned, they release dangerous toxins and carcinogens into the air leading to air pollution



6

Single Use Plastic Bags...

## Environmental Impacts

- Clog our storm drains and pollute our streams
- Fill with silt and act like sand bags in storm drains and on the bottoms of creeks and rivers.
- Become ocean fill - kills marine life
- Enter landfills or blight the landscape
- Only about 1-5% of plastic bags are recycled



7

Single Use Plastic Bags...

## Environmental Impacts

- Every hour, approximately 200,000 plastic bags are land filled
- Plastic bags photo degrade; over time they break down into smaller, more toxic petro-polymers which eventually contaminate soils and waterways like the Trinity River
- May take 1,000 years to breakdown.



8

## Single Use Plastic Bags...

### Options: Voluntary/Educational Approach

- Definition: Willingly participate to promote plastic bag recycling/reduction
- Pros: brings a culture change
- Cons: longer time frame and greater effort to achieve substantial reduction
- Examples:
  - City of Austin partners with Keep Austin Beautiful and Retailers
  - Whole Foods Market sacked plastic bags on Earth Day 2008, giving customers instead a choice between recycled papers or reusable bags.
  - Wal-Mart is phasing in reusable bags
    - Made from 85% recycled content
    - Available near checkout aisles
    - Can be returned at the end of their life-span for recycling.



9

## Single Use Plastic Bags...

### Options: Surcharge/Fee



- Definition: plastic shopping bag levy paid directly by consumers.
- Pros: enforcement can be monitored and tracked, generates funds to start more recycling centers
- Cons: Potential legal challenges
- Example:
  - Ireland: 15 cent fee per bag on retail customers; 90% reduction in bag use since the introduction of levy
  - Seattle: 20 cent fee per bag starting Jan 2009; In July 2010, the ban will expand to include plastic utensils and plastic food containers
  - San Francisco, CA- levy on plastic shopping bags; Biodegradable plastic and recyclable paper will be allowed under the legislation; ban on paper bags from virgin fibers.
  - March of 2007 **IKEA** started charging customers of U.S. stores 5 cents per plastic bags

10

Single Use Plastic Bags...

## Options: Recycling

- Definition: converting materials that are no longer useful as designed or intended into a new product.
- Pros: Culture change, reduce usage of natural resources
- Cons: costs to set up recycling centers; difficulty of recycling
- Examples:
  - **New York City, New York** – (January 25, 2008)  
Requires large stores and retail chains to collect and recycle plastic bags they give to shoppers.
  - The legislation applies to stores of 5,000 square feet or larger, as well as all branches of chains with more than five locations in the city. .

11

Single Use Plastic Bags...

## Options: Ban

- Definition: complete stop to the use of plastic bags
- Pros: substantial reduction in usage numbers; significant environmental benefits
- Cons: Potential Legal Challenges
- Examples:
  - A superior Court Judge issued a tentative ruling placing an injunction on Oakland's plastic bag ban, saying the City should have more adequately studied the environmental impacts of the ban before passing the law. A full environmental review could cost \$100,000 or more

12



Single Use Plastic Bags...

## Options: Biodegradable Plastic

- Petroleum-based
- While they break down into smaller particles, chemicals eventually show up in the food chain and our bodies.
- Cannot be recycled with traditional plastic bags - contaminates the recycling stream
- Does nothing to address the issue of consumption



Single Use Plastic Bags...

## Options: Paper Bags



- Tens of millions of trees are cut down to make paper bags (14,000,000 in the U.S. alone last year.)
- It takes more than 4 times as much energy to manufacture a paper bag as it does to manufacture a plastic bag.
- Paper manufacturer is one of the most polluting industries. Millions of tons of mostly acidic waste and chlorine are poured into the environment each year.
- Paper in today's landfills does not degrade or break down at a substantially faster rate than plastic does.

Single Use Plastic Bags...

## City of Dallas Recommendations

### Short-term (Year 1):

- Recycling/Reduction Program - Work with Dallas-area retailers to:
  - Set up collection bins to take back plastic bags for recycling,
  - Offer consumers the option of purchasing reusable shopping bags
- Initiate public outreach and education campaign promoting the benefits of choosing reusable cloth bags over plastic or paper options.



15

Single Use Plastic Bags...

## City of Dallas Recommendations

### Medium-term (Year 1-3):

- Pursue State Legislative authority to institute either a per unit fee or Refund Value (RV) of 5 cents per bag. Revenues could fund:
  - Recycling centers for plastic bags
  - Clean-up initiatives for the Trinity and other Dallas waterways and water bodies

### Long-term (Year 3-5):

- Initiate complete ban on single-use plastic bags by Council ordinance

16

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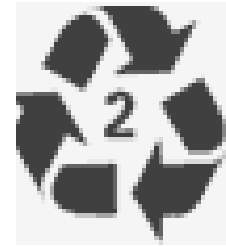
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