Approved: March 19, 2010
Date

# MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 a.m. on March 3, 2010, in Room 785 of the Docking State Office Building.

All members were present except:

Representative Tony Brown- excused

Representative Gail Finney- excused

Representative Carl Holmes- excused

Representative Dan Johnson- excused

Representative Annie Kuether- excused

Representative Margaret Long- excused

Representative Don Myers- excused

Representative Cindy Neighbor- excused

Representative Connie O'Brien- excused

Representative Rob Olson- excused

Representative Richard Proehl- excused

Representative Joe Seiwert- excused

Representative Mike Slattery- excused

Representative Tom Sloan- excused

Representative Vern Swanson- excused

# Committee staff present:

Matt Sterling, Office of the Revisor of Statutes

Cindy Lash, Kansas Legislative Research Department

Iraida Orr, Kansas Legislative Research Department

Renae Hansen, Committee Assistant

# Others attending:

None

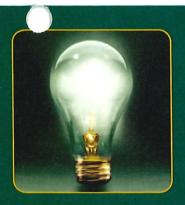
The committee met at 9:00 a.m. and those that wanted, went to the Waste Management facility that is north of Topeka in Shawnee county off of highway 75. At the Waste Management facility the committee toured the methane gas to energy production center where they asked questions about the process.

We were given a several informational documents while there:

- Fact Sheet, Waste Management Renewable Energy, meeting the demand for green energy. (Attachment 1)
- Typical Anatomy of a Landfill, (<u>Attachment 2</u>)
- Waste Management, Corporate Fact Sheet, (Attachment 3)

The next meeting is scheduled for March 8, 2010.

The meeting was adjourned at 10:40 a.m.



Governments,
businesses and the
public are increasingly
concerned about the
security of supply, the
sustainability and the
environmental impact
of our energy sources.

Waste Management
is responding to
the demand for
alternatives to fossil
fuels through the
development of wastebased energy from the
waste we all generate.

# Waste Management Renewable Energy Meeting the demand for green energy.

# **Converting Landfill Gas to Energy**

Today's modern, engineered landfill is an environmentally sound system for waste disposal that minimizes the impact on the environment. Landfills also offer a clean, renewable energy resource that is generated continuously through the decomposition of waste in landfills. This resource is known as landfill gas or methane.

Waste Management operates the largest network of landfills in our industry. Nearly 300 sites manage the disposal of millions of tons of waste per year, providing us with a vast supply of a natural, renewable energy source: landfill gas. Most landfills collect landfill gas, a greenhouse gas, and burn it in a flare system to destroy it. Instead of simply flaring the gas, Waste Management uses this gas in a variety of applications to create green energy. There are three basic types of landfill gas-to-energy facilities.

**Electricity:** Landfill gas is used as a fuel to generate electricity at small power plants at the landfills, or at a nearby industry, with the generated electricity delivered to a utility company.

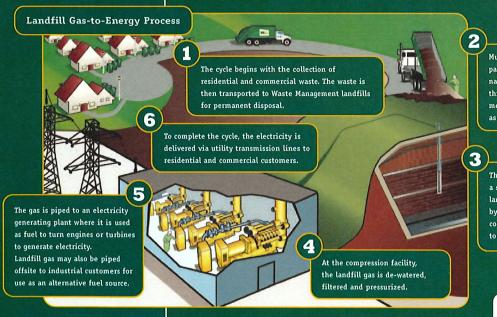
**Alternative Fuel:** Landfill gas is piped to an industrial or commercial facility where it is used for heating, in place of or in combination with fossil fuels such as oil, coal or natural gas.

**Processed Gas:** Landfill gas is processed and cleaned to natural gas quality and delivered to transmission pipelines, to be used in the normal applications for natural gas.

The U.S. Environmental Protection Agency (EPA) has endorsed landfill gas as an environmentally friendly energy resource that reduces our reliance on fossil fuels like coal and oil.

Waste Management's renewable energy group works closely with businesses, industries and public utilities to develop beneficial-use projects, from landfill gas to waste-to-energy, providing an economical and environmentally wise alternative to fossil fuels.

We currently supply landfill gas to more than 100 beneficial-use gas projects in North America, providing the equivalent of more than 475 megawatts of energy—enough to power more than 400,000 homes as well as saving the equivalent of nearly seven million barrels of oil per year.



Much of this waste, including food, paper and cardboard, is organic in nature. Anaerobic bacteria digest this organic waste and produce methane gas and carbon dioxide as natural byproducts.

The methane gas is recovered via a series of wells drilled into the landfill. These wells are connected by a common pipe system that collects the gas and transports it to a nearby compression facility.

When you think renewable energy Think Green? Think Waste Manage

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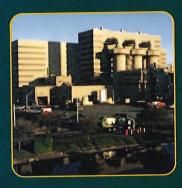
ATTACHMENT 1-1



Landfill gas from two Waste
Management landfills provides a
reliable and constant energy source
for the Dairyland Power Cooperative
to power 4,000 homes in the
communities of Bruce, Wisconsin,
and Lake Mills, Iowa, each day.



Landfill gas from Waste
Management's Ste. Sophie landfill
north of Montreal, Canada, is
replacing 75 percent of the natural
gas used at the nearby Cascades
paper mill. The mill's 10-year
contract to use landfill gas as a
cost-efficient, alternative energy
source is credited with keeping
the plant in operation after rising
fuel costs threatened to shut down
the plant.



Using trash as fuel to generate electricity, Wheelabrator's North Broward waste-to-energy plant in Pompano Beach, Florida generates approximately 60 megawatts of energy, enough to power about 35,000 homes.

# **Waste Management Renewable Energy**

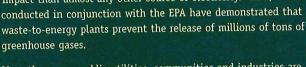
Renewable. Reliable. Ready.

# **Waste to Energy**

In addition to converting landfill gas to energy, we also help to conserve fossil fuels by converting waste into energy. Waste Management's subsidiary, Wheelabrator Technologies, uses trash as fuel to generate electrical power through its 17 waste-to-energy plants, which have the capacity to process more than 24,300 tons of waste per day. These plants have a combined generating capacity of 686 megawatts of electricity, enough energy to power more than 700,000 homes. Waste-to-energy plants can also provide steam to municipal district heating systems or nearby industrial facilities. Converting trash to energy reduces the volume of the waste by 90 percent, saving valuable space in landfills while providing a viable and economical alternative to the use of fossil fuels.

A leading waste-to-energy provider in the country, Wheelabrator pioneered the commercial waste-to-energy industry more than 30 years ago. Since then, the company has processed more than 130 million tons of municipal solid waste into energy, saving more than 130 million barrels of oil while generating 70 billion kilowatt hours of clean, renewable electricity.

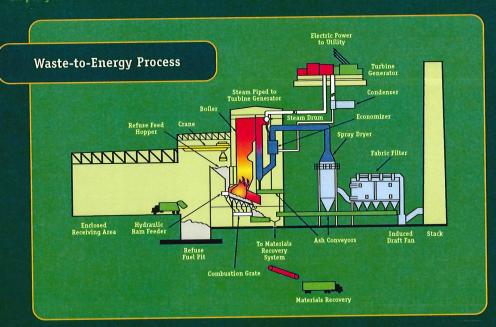
The waste-to-energy process used by Wheelabrator is one of the cleanest forms of electricity generation. In fact, the EPA has stated that waste-to-energy plants, like those operated by Wheelabrator, produce electricity "with less environmental impact than almost any other source of electricity." And, studies





More than ever, public utilities, communities and industries are actively seeking to make renewable energy a part of their energy supply. Waste Management's renewable energy group is a vital and important part of North America's drive to develop alternative energy sources and promote environmental sustainability.

Together, Waste Management's landfill gas projects and waste-to-energy projects produce enough electricity to power one million homes, saving the equivalent of more than 14 million barrels of oil per year.



From everyday collection to environmental protection, Think Green. Think Waste Management.

# Typical Anatomy of a Landfill

#### **Protective Cover**

Cover Vegetation

As portions of the landfill are completed, native grasses and shrubs are planted and the areas are maintained as open spaces. The vegetation is visually pleasing and prevents erosion of the underlying soils.

Top Soil

Helps to support and maintain the growth of vegetation by retaining moisture and providing nutrients.

PROTECTIVE COVER SOIL

Protects the landfill cap system and provides additional moisture retention to help support the cover vegetation.

#### **Composite Cap System**

Orainage Layer

A layer of sand or gravel or a thick plastic mesh called a geonet drains excess precipitation from the protective cover soil to enhance stability and help prevent infiltration of water through the landfill cap system. A geotextile fabric, similar in appearance to felt, may be located on top of the drainage layer to provide separation of solid particles from liquid. This prevents clogging of the drainage layer.

Geomembrane

A thick plastic layer forms a cap that prevents excess precipitation from entering the landfill and forming leachate. This layer also helps to prevent the escape of landfill gas, thereby reducing odors.

Compacted Clay

Is placed over the waste to form a cap when the landfill reaches the permitted height. This layer prevents excess precipitation from entering the landfill and forming leachate and helps to prevent the escape of landfill gas, thereby reducing odors.

#### **Working Landfill**

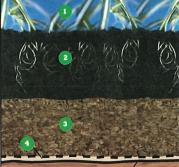
Daily Cover

At the end of each working period, waste is covered with six to twelve inches of soil or other approved material. Daily cover reduces odors, keeps litter from scattering and helps deter scavengers.

📵 Waste

As waste arrives, it is compacted in layers within a small area to reduce the volume consumed within the landfill. This practice also helps to reduce odors, keeps litter from scattering and deters scavengers.

Please Note: This illustration depicts a cross section of the standard environmental protection technologies of modern landfills. While the technologies used in most landfills are similar, the exact sequence and type of materials may differ from site to site depending on design, location, climate and underlying geology.





#### Leachate Collection System

Leachate is a liquid that has filtered through the landfill. It consists primarily of precipitation with a small amount coming from the natural decomposition of the waste. The leachate collection system collects the leachate so that it can be removed from the landfill and properly treated or disposed of. The leachate collection system has the following components:

Leachate Collection Layer A layer of sand or gravel or a thick plastic mesh called a geonet collects leachate and allows it to drain by gravity to the leachate

collection pipe system.

Filter Geotextile

A geotextile fabric, similar in appearance to felt, may be located on top of the leachate collection pipe system to provide separation of solid particles from liquid. This prevents clogging of the pipe system.

Leachate Collection
Pipe System

Perforated pipes, surrounded by a bed of gravel, transport collected leachate to specially designed low points called sumps. Pumps, located within the sumps, automatically remove the leachate from the landfill and transport it to the leachate management facilities for treatment or another proper method of disposal.

## **Composite Liner System**

12 Geomembrane

A thick plastic layer forms a liner that prevents leachate from leaving the landfill and entering the environment. This geomembrane is typically constructed of a special type of plastic called high-density polyethylene or HDPE. HDPE is tough, impermeable and extremely resistant to attack by the compounds that might be in the leachate. This layer also helps to prevent the escape of landfill qas.

(B) Compacted Clay

Is located directly below the geomembrane and forms an additional barrier to prevent leachate from leaving the landfill and entering the environment. This layer also helps to prevent the escape of landfill gas.

Prepared Subgrade

The native soils beneath the landfill are prepared as needed prior to beginning landfill construction.

(Not to scale)

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ATTACHMENT 2



# W ho we are.

There are times when a company is called upon to show its true strength and to prove its ability to navigate uncertainty and change. Times that demand proof of discipline, a solid foundation, and a sound strategy focused on continuing improvement. Those times are here. And Waste Management is prepared to meet the challenge.

# W e are the largest waste company in North America.

As the leading provider of comprehensive waste and environmental services, Waste Management collects approximately 66 million tons of solid waste annually from nearly 20 million residential, municipal, commercial and industrial customers in the U.S., Canada and Puerto Rico.

We operate the largest network of landfills in our industry, with 273 active sites managing the disposal of approximately 110 million tons of waste per year. To make disposal more economical for larger urban markets, where the volume of waste and distance to landfills or waste-to-energy facilities tends to increase, we manage 355 transfer stations that consolidate, compact and transport waste in an efficient manner.

# W e help power communities.

The average person produces 4.5 pounds of garbage every day, and we are expanding the ways in which those materials are recovered. One way we put waste to reuse is by using it to create clean, renewable energy. This can be done by recovering the methane occurring naturally in landfills for use in the generation of electricity, or to use it as an alternative fuel in industrial facilities. With 111 landfill-gas-to-energy plants currently in operation, we produce about 500 megawatts of green energy—enough to power more than 400,000 homes.

We also convert waste into energy through a highly efficient combustion process. Our waste-to-energy subsidiary, Wheelabrator Technologies Inc., operates 16 plants that can process an aggregate of 21,340 tons of waste per day and generate more than 600 megawatts of electricity, enough clean, renewable energy to power 650,000 homes and replace nearly 7 million barrels of oil. Added to this, the power produced from waste-to-energy plants has less environmental impact than almost any other source of electricity, according to the U.S. EPA.

# W e recycle waste.

Waste Management is also North America's largest recycler of householdgenerated recyclables, processing close to 8 million tons of materials annually, including paper, cardboard, glass, plastic, metal and electronics. Through our operations, we provide cost-efficient, environmentally sound programs for municipalities, businesses and households across the U.S. and Canada. In 2008 alone, we:

- Managed enough recyclables to fill the Empire State Building more than 11 times.
- Oversaw enough commodities to fill 99,000 Boeing 737 airplanes.
- Recycled more than 40,000 tons of aluminum, saving enough energy to power 1.6 million televisions for 13 hours a day for a year.

# W e are growing.

In addition to our traditional waste operations, Waste Management is expanding to increase the service offerings we provide for our customers and the communities we serve. These include:

- Healthcare Solutions -- the branch of our business offering healthcare facilities quality disposal and recycling programs.
- LampTracker<sup>®</sup>-- North America's largest bulb recycler, overseeing the collection and processing of CFLs and fluorescent lights.
- Green Squad<sup>SM</sup> -- an innovative program helping businesses identify operational savings through waste reduction and energy efficiency.
- Greenopolis<sup>su</sup>— a green social network built for communities and businesses to construct information online about our environment.

## W e are a company of value.

Despite the economic challenges of 2008, we achieved strong financial results. Income from operations of our collection business improved even though volumes declined, demonstrating the effectiveness of our pricing and cost control strategies developed over the past three years. In 2008, we strengthened this discipline by using the combined input of operations, sales, and price management teams to ensure that we have a competitive offering for new business opportunities.

# SENIOR MANAGEMENT



David P. Steiner Chief Executive Officer

Mr. Steiner joined the company in November 2000 as Vice President and Deputy General Counsel and was appointed Senior Vice President, General Counsel and Corporate Security in July 2001. In April 2003, he was elected CFO before being elected CEO in March 2004.



Larry O'Donnell
President &
Chief Operating Officer

Before being named President and COO, Mr. O'Donnell was Waste Management's Executive Vice President, Operations Support and Chief Administrative Officer. Prior to that, he was Executive Vice President of Waste Management's Western Group.



Robert Simpson
Chief Financial Officer

Prior to becoming CFO, Mr. Simpson was Senior Vice President and Chief Accounting Officer and Vice President, Tax for Waste Management. Before joining the company, he served as Vice President and General Manager of Tenneco Business Services, Tenneco's shared-service arm.

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ATTACHMENT 3-



Most people know us from our big green trucks and bins. They think of us as a garbage company. They don't see us as the environmental services company that provides a sustainability platform for families, businesses and municipalities. Our company has a goal — to help ensure that we pass on the planet to the next generation in better shape than we inherited it. This is a lofty goal, and we can't do it alone, but we hope to set an example for others to follow. Our world and the people who inhabit it are worthy of our highest aspirations and our best efforts, which is why we have set four goals to achieve by the year 2020:

Waste is a renewable energy source. Today we use it to create enough energy to power more than 1 million homes every year. That's the equivalent of replacing 14 million barrels of oil or 4.1 million tons of coal every year. By 2020, we expect to double that output and power more than 2 million homes. Landfill-gas-toenergy plants convert a powerful greenhouse gas, methane, into an energy source. Through our efforts to increase the number of these plants, we're adding 22 megawatts of energy production, and are in the process of constructing 10 new plants that will produce an additional 50 megawatts of power.

As North America's largest residential recycler, we are committed to reducing waste. By 2020, we expect to triple the amount of recyclable materials we manage, from 8 million to more than 20 million tons. Part of that is coming from increased volumes as we use single-stream technology to make recycling easier for consumers. Our singlestream volumes are up nearly 15 percent because of these efforts. We're further increasing volumes through new offerings like electronics recycling, with great success. E-cycling volumes have increased about 29 percent. We're even helping customers attain their "zero waste" goals.

Today, we have 26,000 vehicles in our fleet. Over the next 10 years, we will ask our suppliers to develop a truck that improves the fuel efficiency of our fleet by 15 percent and reduces fleet emissions by 15 percent. With Waste Management expecting to spend more than \$450 million per year on new trucks, that's a strong incentive for manufacturers to create a breakthrough technology for a new hybrid engine. In fact, we are working with four suppliers on different technologies for hybrid trucks and heavy equipment, each in a different stage of testing but all showing promise. And we are partnering with a leading non-governmental organization and other companies to develop additional incentives to bring heavy-duty hybrid technology to the marketplace.



We think of a world where the environment is respected and every action is aimed at recovery and restoration. By 2020, we want Waste Management to achieve a fourfold increase in the number of our facilities certified by the Wildlife Habitat Council. That means at least 100 of our landfills will have a total of more than 25,000 acres set aside for conservation and wildlife habitatan area more than one-and-a-half times the size of Manhattan Island. We've made tremendous progress. As of November 2008, we had received certifications on a total of 49 landfills and had protected a total of about 21,000 acres.

At Waste Management, we look to use our knowledge and experience to the benefit of our customers and the benefit of the planet. We are leading the way to new, sustainable solutions that work with every link in the supply chain to address the entire life cycle of a product. Together, we can become more efficient by: engineering products using fewer valuable resources, designing products to recover the raw materials in them when they can no longer be reused, and innovating to convert waste products into new products or renewable energy at the end of their lives. Driven by a commitment to excellence and leadership, we are positioned to deliver lasting solutions to the environmental challenges our planet will face in the 21st century.

# CORPORATE INFORMATION

# **FINANCIAL HIGHLIGHTS:**

All information as of 12/31/2008

For the year ended December 31, 2008:

**Total Revenue** \$13.38 billion \$1.08 billion **Net Income** Diluted Earnings Per Share \$2.19 **Total Assets** 

\$20.227 billion

NYSE: WMI

Fiscal Year Ends: December 31 Shares Outstanding: 492 million 52-Week Stock Price Range: \$24.51 - \$39.25

#### **OPERATING AREAS:**

47 states, District of Columbia, Canada, and Puerto Rico

## **CUSTOMERS SERVED** Nearly 20 million

**ACTIVE LANDFILLS: 273** 

**COLLECTION OPERATIONS: 367** 

TRANSFER STATIONS: 355

**COLLECTION VEHICLES: 21,000** 

**LNG AND CNG-POWERED** VEHICLES: 425

#### **RECYCLING:**

Recycling Facilities: 104 Single Stream Facilities: 30 **Recycling Materials** Managed: 7.6 million tons

EMPLOYEES: Approximately 45,000

#### **INVESTOR INFORMATION**

Jim Alderson (713) 394-2281 jalderson@wm.com

## **MEDIA INFORMATION**

Lynn Brown (713) 394-5093 lynnbrown@wm.com

# **CORPORATE OFFICE**

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