Neighbor

Neighbor to Neighbor –Waste Management is Committed to Keeping You Informed

Volume 1, Number 2 December 2004

Dear Neighbors

Thanks to those of you who attended the Texas Commission on Environmental Quality public meeting in October to discuss the Williamson County Landfill and its expansion plans.

We very much appreciated your taking time to learn about how we intend to address important infrastructure issues as our community continues to grow and prosper. It was important to us to provide comprehensive information to you about the landfill, ongoing environmental controls at the landfill to protect the environment, the permit process for an expansion, future road improvements to address traffic concerns, and our long range plans for the Williamson County landfill to ensure that we can continue serving Williamson County residents and businesses with the same level of economy and service.

As part of our efforts to provide information to residents about the Williamson County Landfill, Waste Management has developed a website that includes facility information, environmental controls, and general resources. Please go to http://williamsoncountylandfill.wm.com.

This issue of the newsletter reviews how landfill cells are designed and constructed to protect the environment, particularly groundwater and surface water.

Please feel free to contact either one of us with any questions you might have.

Sincerely,

Frankie Limmer
Williamson County Precinct #4

Steve Jacobs
Waste Management

Free Tree Recycling

Williamson County and Waste Management will offer free tree recycling at the Williamson County Landfill, 600 Landfill Road (off 1660), from Monday, December 27 through Saturday, January 8. The landfill is open from 7 a.m. to 5 p.m. Monday - Friday and 7 a.m. until noon on Saturday. The landfill is closed on Sundays.

Waste Management Wishes You a Wonderful Holiday Season and a Happy New Year!

Wishing You A Joyous Holiday Season

The holidays are upon us and as we feast, give gifts, decorate and travel, we also consume lots of resources and generate lots of waste. The volume of household garbage generally increases 25 percent between Thanksgiving and New Year's Day.

Everyone can help lessen the amount of trash produced while still enjoying the holidays and creating wonderful memories. Here are some ideas for your family to consider this holiday season.

Decorating

- Use more energy efficient mini-lights rather than the larger lights. Turn them on only when people are around to appreciate them.
- Wrap gifts in newspaper, paper bags, or a child's artwork.
- Wrap a gift with a gift – use scarves, table linens or belts.
- Use hair bows, ornaments, shoe laces or toys as decorative bows and ribbons.

Cards

- Buy cards made from recycled paper and printed in non-toxic inks.
- Consider substituting postcards for cards that require envelopes.
- Re-use the front of holiday cards as gift tags.

Trees

- Buy a living tree, grown locally, that you can plant outside or keep as a houseplant after the holidays.
- Use trimmed branches from your tree for decorating around the home or making wreaths.
- Take your tree to be chipped into compost or used in a natural habitat.

"Green" Gift Ideas

- Give a garden! Seeds, gloves, tools are great gifts.
- Family recipes
- Tickets to sports, music, theater events
- Free baby-sitting
- Bird feeder and seed

Williamson County Landfill

600 Landfill Road
Phone: 512.759-8881
Fax: 512.759-5004

Williamson County Landfill
600 Landfill Road
Hutto, TX 78634

Building a Landfill

The Williamson County Landfill is operated safely and in full compliance with stringent state and federal environmental regulations. Waste Management meets or exceeds state and federal environmental requirements designed to protect groundwater and surface water.

The landfill is scientifically engineered to minimize environmental impacts through use of sound planning, design and operations, which provide safe, long-term disposal of waste within its facility. In addition the landfill is monitored under a comprehensive program to protect air, surface water and groundwater.

This graphic illustrates a cross-section of a landfill. It shows the numerous layers and liners designed to contain trash and its byproducts and prevent contaminants from entering the groundwater.

Liner System

The landfill liner system consists of compacted clay and a very durable, high-density polyethylene (HDPE) plastic liner along the bottom and sides of the cell excavation (imagine a sturdy, plastic Tupperware-like bowl.)

When building a landfill cell, native foundation soils are leveled and prepared for liner installation.[14] Placed on top of the soil is a minimum, two-foot layer of compacted clay.[13] Above the clay layer is the synthetic plastic layer.[12]

These layers form a barrier to prevent liquids called "leachate" from leaving the landfill. Leachate is liquids generated from rainfall and the natural decomposition of waste. These layers also help prevent the escape of landfill gas that is produced by the decomposing trash.

Leachate Collection System

A leachate collection system is placed above the synthetic and clay liners to remove leachate. Beneath the waste is a layer of sand or a thick plastic mesh called a geonet[9] that allows leachate to drain to the leachate collection pipe system. A geotextile fabric[10] (which looks like felt) is placed on top of the leachate collection pipe system to help separate solid particles from liquids.

The cell bottom is sloped to promote drainage of leachate through the geonet to trenches and then to a low point known as a sump. Pipes[11] are typically placed in the trench and then covered with rock to further promote drainage to the sump.

A large pipe extends from the sump up the side slope of the cell to its crest. A pump is lowered down this pipe and used to remove leachate from the cell for storage in above-ground tanks, where it is removed and transported offsite to a permitted wastewater treatment facility.

Once the cell is completed and the construction reports reviewed and approved by TCEQ, trash[8] is compacted in layers within a small area, called the "working face." The working face is the open area used for safe, efficient trash disposal on any given day. At the end of each operating day, the working face is covered with a six-inch layer of soil called daily cover.[7] The small working face and daily cover both help reduce odors, keep litter from scattering, and deter birds.

Once the trash reaches capacity, it is capped to prevent excess precipitation from entering the landfill and to help control landfill gases and potential odors. Soil[2-3] and grasses[1] are used to protect the cap system and to prevent erosion.