



# Solid Waste Update

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## Sedgwick County's New Household Hazardous Waste Collection Facility: A Model for Design and for Serving the Public

by Steve Sellmeyer, Bureau of Waste Management

One of the newest and most successful Household Hazardous Waste (HHW) facilities in the state is located in Wichita. This facility, which is owned and operated by Sedgwick County, was authorized for construction by a solid waste processing permit issued in May 2002. Centrally located in Wichita at 801 Stillwell, the facility is proving to be a convenient and popular service to the citizens of the county. Already this year the facility has had a participation rate increase of 22% from last year. Open on Tuesday & Thursday 9 am - 7 pm, Wednesday & Friday 9 am - 4 pm, and Saturday 9 am - 3 pm the facility seeks to accommodate the many different schedules of the public.

In addition to accepting common HHW, the facility is also permitted to accept hazardous waste from Kansas defined Small Quantity Generators (SQG), which are businesses that generate less than 55 pounds of hazardous waste or 2.2 pounds of acutely hazardous waste in a single calendar month. SQGs are exempt from certain regulations and are allowed to dispose of their hazardous waste in permitted landfills, just as HHW is exempt. The SQG part of the program serves virtually the same purpose as the HHW portion, that is to provide an alternative to the disposal of SQG waste with

ordinary trash. Once received, both HHW and SQG waste are inventoried, segregated by hazard class, and stored for proper disposal or recycling. Materials that are received in their original container, in good condition, with their label intact are separated from the waste materials and placed on shelves for reuse by the public. This is referred to as the Swap-&-Shop. Here citizens are allowed to browse the shelves for products they need at no cost to them. This reduces overall

disposal rates and saves not only on disposal costs, but the citizens save too by not needing to purchase new products. This feature has been a very successful part of the program saving approximately \$10,000 in disposal costs in 2003 thus far.

The 8,000 square foot building was designed to safely

*(continued on page 5)*



*Sedgwick County's HHW Facility*

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## **KDHE Receives Hundreds of Comments on Harper County Plumb Thicket Landfill**

*by Bill Bider, Director, Bureau of Waste Management*

Never in Kansas history has an application for a landfill received so much attention as the proposed Waste Connections Plumb Thicket Landfill in Harper County. The public comment period closed on May 16 and hundreds of comment letters and post cards have been received, mostly in opposition to the landfill. The governor's office and legislators have also been contacted by many persons opposing this controversial proposal to establish a future disposal site for Sedgwick County's solid waste. Comments from as far away as Oklahoma have also flowed in opposing the landfill. Nearly all opposition is related to the opinion of many people that the landfill would be located too close to the Chikaskia River. In addition to public opposition, some legislators introduced bills and bill amendments to kill the landfill this year, but all attempts failed.

The Bureau of Waste Management must now review, organize, and respond to all public comments. A department decision on whether to issue the permit will follow. Because of the large number of comments and political implications, the department's final decision and preparation of a responsiveness summary will likely take months.

This proposed landfill would be located along the north edge of Harper County. The landfill would be located 1.8 miles from the Chikaskia River, but the closest distance is to the northeast which is hydrologically up-gradient from the landfill. The distance to the river in the down-gradient direction ranges from about 3 to 6 miles. The landfill itself as proposed would comprise 229 acres on a 958 acre site. Buffer zones around the landfill would be at least 1000 feet in each direction. An extensive groundwater monitoring system has been proposed by Waste Connections which would adequately monitor for any potential contaminant releases according to geologists in KDHE and the Kansas Geologic Survey.

Waste Connections wants this landfill for the disposal of the Sedgwick County waste which passes through their large transfer station. Presently, that waste goes to a Waste Connections landfill in Oklahoma. Many solid waste transport vehicles already pass through Harper County on their way to and from disposal in OK. With this landfill, Waste Connections hopes to avoid having trucks travel hundreds of miles per day including through the cities of Harper and Anthony.

Most public comments oppose this landfill; but several comments have been received from planners and the general public in Sedgwick County in support of the landfill. Waste Connections has said they will implement a major curbside recycling program in SG county, but it will only be economically feasible for them to do so if the new landfill is permitted.

### **Training Opportunity for MSWLF and SAL Operators and Supervisors**

The Kansas Department of Health and Environment and the SWANA/Kansas "Sunflower Chapter" will again be jointly sponsoring training for operators, supervisors, and managers of Municipal Solid Waste Landfills (MSWLFs) and Small Arid Landfills (SALs) on September 18 and 19, 2003 at the Red Coach Inn in Salina. We are planning to provide another high quality training course similar to the one held in 2001 when over 110 persons attended the training in Hutchinson.

Course flyers will be mailed in July. Please watch your mail and the Bureau of Waste Management's web site for details. We encourage you to attend this training course if you are a MSWLF or SAL operator, supervisor, manager, gatehouse attendant, or you are interested in learning more about MSWLF/SAL operations. Knowledgeable and experienced MSWLF and SAL managers from Kansas will present their best ideas on how you can improve the quality and efficiency of operations at your MSWLF/SAL. Included will be a field visit to the City of Salina's MSWLF. For the first time, this training will be followed on Friday and the next day by SWANA's statewide landfill equipment operators and collection vehicle drivers ROAD-E-O.

# You Can Make A Difference

by Jim Rudeen  
Bureau of Waste Management

*“Who says one person isn’t important? Who says one person can’t make a difference? Who says the way we treat our environment doesn’t matter? The fact is that one person does matter. And in Kansas, each of us, individually, has the responsibility to take care of our environment.”*

These are the opening lines of a new *Kansas Don’t Spoil It!* 30 second television and radio Public Awareness campaign currently being run across Kansas. The campaign is designed to encourage all Kansans that their individual actions to reduce litter, recycle and cleanup our environment do make a difference. The spots will run this spring and early summer on a variety of radio and television stations across the state. Additional coverage is being planned for the fall and winter of 2003. For more information on the new campaign, or to obtain a copy of the video, contact Jim Rudeen at 785-296-1603 or e-mail at [jrudeen@kdhe.state.ks.us](mailto:jrudeen@kdhe.state.ks.us). And remember, *You Can Make a Difference!*



[www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste)

## Open Burning Reminder . . .

by John Mitchell, Bureau of Waste Management

Open burn sites are approved by KDHE primarily for burning trees and brush. Typical air contaminants resulting from open burning of materials, including clean wood, include fine particulate matter, carbon monoxide, sulfur oxides, nitrogen oxides, and many organic compounds. There are many health concerns associated with breathing the air pollutants found in wood smoke.

Burning more than incidental amounts of clean lumber and pallets at these sites is not allowed. Disposal of such materials from commercial or industrial sources at these sites is prohibited. KDHE staff will be inspecting open burn sites and evaluating compliance with existing requirements. Inspectors will note and document the presence of any commercial and industrial generated material in the open burn area. The inspector’s written reports will be referred to the Central Office in Topeka for enforcement decisions.

Questions on this policy should be directed to 785-296-1600.

# 2004 WORKS!

**March 23-25, 2004  
Lindsborg, Kansas**

Mark your calendars for March 23-25, 2004 when WORKS! 2004 Conference on Solid Waste Management returns to Lindsborg, Kansas where it all began. You won’t want to miss this special 10<sup>th</sup> Anniversary Celebration. We will look back on 10 years of improvements in waste management in Kansas and forward to future challenges.

The 2004 Conference will focus on Safety and Health issues associated with solid waste management and recycling, but will also take some time to reflect on

the past 10 years of a highly successful conference. One highlight of the Conference will be the keynote address to be given by

national renowned television producer and native Kansan, Bill Kurtis.

Kurtis is well known for his work on the Emmy Award winning “Investigative Reports with Bill Kurtis” on the A&E Network. He also is an anchor of

“American Justice” and Executive Producer of “The New Explorers with Bill Kurtis”.



[www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste)

## KDHE Secretary Bremby and Governor Sebelius Recognize Winners

by Rodney Ferguson  
Bureau of Waste Management

School children from across the State, 13 in all, recently gathered in the Governor's office with Governor Kathleen Sebelius and KDHE Secretary Roderick L. Bremby to announce the winners of the 2004 *Kansas Don't Spoil It!*



1st Place Winner - 2004 Contest

calendar contest which promotes recycling, reuse, and waste reduction. Original artwork from

nearly 4,000 Kansas school children was received. The promotional calendar will be widely distributed this fall.



Pictured from left to right: Klissie DeFore 9<sup>th</sup> grade, Cheney High School; Amanda Freeman Kindergarten, Zion Lutheran School; Lindsey Hlad 11<sup>th</sup> grade, Sylvan Unified High School; Madison Epp 2<sup>nd</sup> grade, Bonner Springs Elementary; Kara Gruber 10<sup>th</sup> grade, Hope Schools; Taylor Beck 1<sup>st</sup> grade, Manhattan Catholic Schools; Cole Beneda 6<sup>th</sup> grade, Belleville Middle School; Lauri Cheng 7<sup>th</sup> grade, Indian Woods Middle School; Governor Sebelius; Mandy Sachse 8<sup>th</sup> grade, Pleasant Ridge Middle School; Katie Walter 4<sup>th</sup> grade, Rosehill Elementary; Kyle Ferguson 12<sup>th</sup> grade, Maize High School; Logan Reed 3<sup>rd</sup> grade, Quinter Elementary; Secretary Bremby; Joslyn Lang 5<sup>th</sup> grade, Victoria Elementary.

## Recycling Activities at the Barton County HHW Collection Facility and Landfill

by Wally Mack, Bureau of Waste Management

Barton County Landfill has initiated a bicycle recycling program in conjunction with First Step Recycling, the recycling center in Great Bend, and the State Correctional Facility in Ellsworth. Mark Witt, Barton County Landfill Manager, said that bicycles in various conditions from slightly used to broken down are pulled out of the waste stream and placed in a roll-off container provided by First Step Recycling. When the roll-off container is full, the bicycles are then hauled to the Ellsworth Correctional Facility. Their facility management has a program where the bicycles are salvaged and repaired by prisoners. The refurbished bicycles are then given to needy children in Ellsworth and the surrounding area.

The Barton County Landfill is also recycling latex paint. Latex paint is brought into the Household Hazardous Waste Collection Facility at the Barton County Landfill. Food-grade 5-gallon buckets are pulled out of the waste stream by the landfill personnel and cleaned. The latex paint is mixed in the 5-gallon buckets by light and dark colors. Off-white latex paint is the most requested color. Mark Witt has a waiting list of individuals who receive the recycled latex paint for free.



### C&D Landfill Operators and Owners Regulatory Information Workshops

The Kansas Department of Health and Environment will be holding workshops at 4 to 6 locations throughout the state in early 2004 (February or March) to provide training on the revised C&D regulations. Please watch for news releases, information flyers, and the Bureau of Waste Management's web site ([www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste)) for the workshop schedule.

## Waste Tire Bill Allows Continued State Cleanup of Tire Piles

by Bill Bider, Director, Bureau of Waste Management

A cooperative effort by KDHE, the Kansas Association of Counties, and the Mid-America Tire Dealers Association led to the passage of a major tire bill this year in the Kansas Legislature (HB 2247). This bill revised many provisions of the Waste Tire Law which should improve waste tire management, facilitate tire pile clean-up, and increase waste tire recycling. The highlights of the bill are listed below:



- KDHE has been given new authority to independently clean up illegal tire piles using revenue from the \$.25 per tire excise tax. Clean-up can only occur if the responsible party is unknown, or unable or unwilling to do so. Cost recovery may or may not be pursued.
- Any accumulation of 50 or more waste tires is defined as "illegal" unless the accumulation is permitted or specifically exempted by the law (e.g., a tire retailer can store up to 1500 waste tires).
- Counties are no longer responsible for the clean-up of illegal waste tire piles.
- Waste tires can be used as a protective layer above a landfill leachate collection system.
- Small numbers of whole tires arriving at a municipal solid waste landfill mixed with other waste may be disposed of in the landfill to minimize hazards to landfill employees.
- With KDHE approval, an owner of an illegal pile can transport those tires to a permitted disposal facility without a permit.
- Tire wholesalers, who also operate retail facilities, can backhaul waste tires without a permit.
- All owners of new, used, or waste tire accumulations must control mosquito breeding.
- A new waste tire recycling grant program for projects to process or utilize waste tires as a material or energy resource was established. In total, fiscal year 2004 grants may not exceed \$200,000. In subsequent years, awards will depend on the availability of funds.

All of these provisions go into effect on July 1, 2003.

## Sedgwick County's New Household Hazardous Waste Collection Facility

(continued from page 1)

store collected HHW with features such as: individual storage areas for materials with different hazard classes, chemical resistant epoxy coated floors, exhaust fans, and explosion proof electrical equipment. It was also designed to be customer and vendor friendly with a large permanent canopy that covers both the vendor loading dock and the customer unloading area as well. The Swap-&-Shop area is

conveniently located at the front of the building so that participants may come and go freely without disrupting the processing of collected waste.

Kolin Anglin, HHW Operations Supervisor, states "We are on track to reach records in the total number of drop-off customers (approximately 8,600) and swap & shop customers



(approximately 1,700). We are also seeing great savings for the department and for our customers. We are not sure

what to expect for the upcoming months since we have exceeded all expectations to date. We are excited about the possibilities of reaching such records in our first full year at the new facility."

## Construction at a Solid Waste Facility Before a Permit is Issued

by Paul Graves, Bureau of Waste Management

The Bureau of Waste Management is often asked, “May we start constructing the landfill [or transfer station, etc.] while the permit application is being processed?” The response we routinely give is, “No, it is not legal to construct the regulated units until the permit is issued, but it is allowable to perform some general site clearing, grading, and construction of auxiliary features such as fencing, etc. at your own risk.”

The basis for this response is provided in Kansas Statutes Annotated (K.S.A.) 65-3407(a), which states, “Except as otherwise provided by K.S.A. 2001 Supp. 65-3407c and amendments thereto, no person shall construct, alter or operate a solid waste processing

facility or a solid waste disposal area of a solid waste management system, except for clean rubble disposal sites, without first obtaining a permit from the secretary.” The exception in K.S.A. 65-3407c has to do with authorized exempt disposal sites for illegal dump cleanups, one-time building demolition where the waste will be disposed onsite, emergency disposal of livestock carcasses, and disposal of waste from transportation accidents or natural disasters. Unless special authorization is requested and approved, these exemptions are not a valid basis for construction, alteration, or operation of solid waste facilities prior to permit issuance.

In an attempt to clarify the types of construction that are allowed

and disallowed prior to issuance of a permit or permit modification, the Bureau issued Policy 03-01 earlier this year. The Policy is available on our web site at [www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste) (click on the link for “BWM & DOE Policies”). The Policy is intended to show that construction of any component of a waste containment or processing system is prohibited until a permit is issued. Conversely, other activities commonly associated with land development, such as clearing, surface grading, constructing roads, etc., are not prohibited but are conducted at the owner’s risk and are subject to any applicable local, state, and federal approvals.

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## Status of New C&D Landfill Regulations

by Christine Mennicke, Bureau of Waste Management

The Bureau of Waste Management (BWM) has been developing a set of regulations specific to Construction and Demolition (C&D) landfills with the help of a task force made up of landfill operators, consultants, and environmentalists (for more details on these regulations, see the November 2002 issue of “Solid Waste Update”).

Last October BWM sent out a copy of the draft regulations to the owner or operator of each C&D landfill in Kansas, along with a survey asking for information on the financial impact of the proposed regulations. The required Regulatory Impact Statement was prepared based on the results of the survey.

The regulations are now in the first step of the State’s regulation adoption process, which includes reviews by the Kansas Department of Administration, the Attorney General, and the Joint Committee on Administrative Rules & Regulations. Publication of the proposed regulations in the Kansas Register will be followed by a two-month public comment period and a public hearing. The regulations will be revised if necessary and adopted by the Secretary of Health and Environment. The entire process, from the Department of Administration review to publication of the adopted regulations is anticipated to take a minimum of eight months. The new regulations will become effective 15 days after their promulgation in the Kansas Register, or according to the date specified in the regulation.

Most of the requirements in these regulations will become effective 90 days after publication in the Kansas Register. In the three months after the regulations are published, BWM plans to provide owners and operators of C&D landfills training opportunities focusing on the requirements of the new regulations.

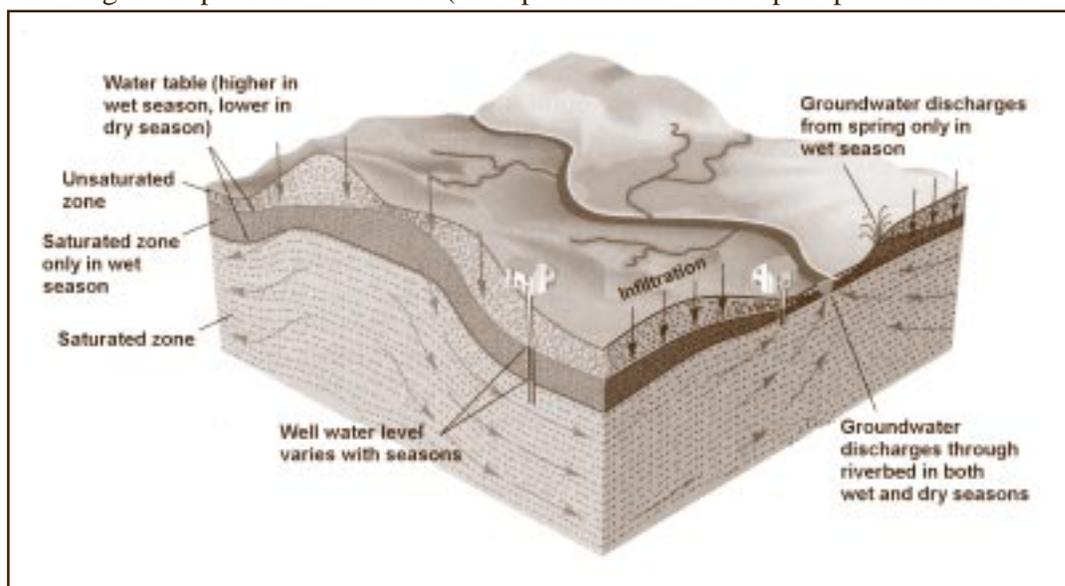
## Groundwater Migration Through Geologic Formations

by John Monroe, Bureau of Waste Management

A common misconception about groundwater is that it occurs in underground rivers much like surface streams. Groundwater actually flows through openings between the grains of sediment (sand, silt, etc.) and through fractures in solid rock (limestone, granite, etc.), as well as dissolution features such as caves and passages. Depending on local geology and climate, groundwater may be present anywhere from a few feet to a few hundred feet below the ground surface.

Compared to the rapid flow of water in surface streams, most groundwater moves relatively slowly. Water moves in response to differences in water pressure and elevation; water within the upper part of the saturated zone tends to move downward following the slope of the water table (the top of the zone where open spaces in rock are completely filled with water).

How fast the groundwater flows depends on the permeability of the material and the slope of the water table. The greater the capacity of a rock to transmit a fluid (the permeability), the greater the ease of flow through the formation, and the faster the flow. The steeper the slope of the water table, the faster the flow. Depending on the aquifer material, groundwater flow velocity can vary from a few feet per year to many feet per day.



Responding to the pull of gravity, water percolates down into the ground through the soil and through fractures and pores in the rock. With increasing depth, fractures and pores tend to be closed by increasing amounts of cement and/or by the weight of the overlying rock. Groundwater flows from high to low pressure; the force of gravity usually makes water run “downhill”. However, groundwater may move downward, horizontally, or upward in response to the pressure from overlying groundwater.

Once the site geology, groundwater depth, flow direction, and flow velocity has been determined, the groundwater monitoring well network can be designed to intercept potential groundwater contamination from the landfill. The number, spacing, and depths of the groundwater monitoring wells are based on site-specific data. The groundwater both entering the landfill area (upgradient) and leaving the landfill area (downgradient) is monitored to confirm the groundwater flow direction, which may change seasonally or with use. If the site geology is adequately characterized and the well network properly designed and constructed, any groundwater contamination should be detected while still on landfill property.



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## Calendar Items

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|------------------------------|---|
| <b>August 26-27, 2003</b>    | 2003 KDHE Environmental Conference<br>Wichita, Kansas                 |
| <b>September 12, 2003</b>    | <i>Kansas Don't Spoil It!</i> Day at the State Fair                   |
| <b>September 18-19, 2003</b> | MSWLF and SAL Operators and Supervisors<br>Training<br>Salina, Kansas |

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