



**Signature Report**

**July 7, 2008**

**Motion 12808**

**Proposed No.** 2008-0246.2

**Sponsors** Hague

1                   A MOTION approving the solid waste division Business  
2                   Plan as required by Ordinance 14971.

3  
4                   WHEREAS, Ordinance 14971 required the solid waste division to develop a  
5 business plan subsequent to completion of the Transfer System and Waste Management  
6 Plan, and

7                   WHEREAS, Ordinance 14971 required that the business plan address, at a  
8 minimum:

- 9                   1. Emergency capacity;
- 10                  2. System reliability;
- 11                  3. Efforts to coordinate planning and operations with other jurisdictions;
- 12                  4. Possible impacts of future system choices on employees;
- 13                  5. Strategies to encourage competition;
- 14                  6. Preserving service levels and value for customers;
- 15                  7. Integration of waste export activities with transfer network;
- 16                  8. Environmental protection; and
- 17                  9. The potential benefits of a federated system, and

18 WHEREAS, the King County solid waste advisory committee and the  
19 metropolitan solid waste management advisory committee have reviewed the business  
20 plan;

21 NOW, THEREFORE, BE IT MOVED by the Council of King County:

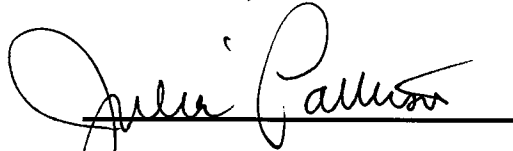
22 The solid waste division Business Plan, Attachment A to this motion, is hereby  
23 approved.

24

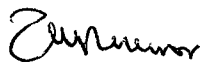
Motion 12808 was introduced on 5/5/2008 and passed by the Metropolitan King County Council on 7/7/2008, by the following vote:

Yes: 9 - Ms. Patterson, Mr. Dunn, Mr. Constantine, Ms. Lambert, Mr. von Reichbauer, Mr. Ferguson, Mr. Gossett, Mr. Phillips and Ms. Hague  
No: 0  
Excused: 0

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON

  
\_\_\_\_\_  
Julia Patterson, Chair

ATTEST:

  
\_\_\_\_\_  
Anne Noris, Clerk of the Council

**Attachments** A. Ordinance 14971--Business Plan--April 2008 revised June 11, 2008

**2008-0246  
Attachment A**

**Ordinance 14971  
Business Plan**

**April 2008  
Revised June 11, 2008**



**King County**

Department of Natural Resources and Parks  
**Solid Waste Division**

## INTRODUCTION

Ordinance 14971, passed by the King County Council in July 2004, requires that the King County Solid Waste Division (the division) prepare a business plan to address nine specific issues. Those nine issues are:

- 1) emergency capacity,
- 2) system reliability,
- 3) efforts to coordinate planning and operation with other jurisdictions,
- 4) possible impacts of future system choices on employees,
- 5) strategies to encourage competition,
- 6) preserving service levels and value for customers,
- 7) integration of future disposal choices with the transfer network,
- 8) environmental protection, and
- 9) the potential benefits of a federated system.

In accordance with the ordinance, these nine issues were briefly addressed in Appendix B of the *Solid Waste Transfer and Waste Management Plan* (Transfer Plan). The Transfer Plan was approved by the King County Council in December 2007. In Appendix B, entitled *Response to Ordinance 14971, Section 5B*, the division provided a brief description of its plans to address the nine issues in the context of future planning. The division also committed to preparing a more in-depth response to the issues approximately four months after adoption of the Transfer Plan. This Business Plan was prepared to fulfill that requirement.

The purpose of the approved Transfer Plan is to guide King County as it prepares the solid waste system for the closure of the Cedar Hills Regional Landfill (Cedar Hills), currently forecast to occur in 2016. During the period preceding Cedar Hills' closure, the transfer system will be upgraded with the construction of new facilities in the South County and Northeast Lake Washington areas, replacement of the Bow Lake and Factoria transfer stations on site, and addition of a public or private intermodal facility or facilities to the system, should waste export continue to be the preferred long-term disposal option. The plan for station construction is phased to ensure that ample station capacity is available throughout the construction process. Prior to the development of new facilities in the South County and Northeast Lake Washington areas, there will be a comprehensive siting process that involves the division, the cities, and the public. No stations will be closed until the proper public involvement processes are conducted and replacement facilities are completed. More detailed plans on the timing of siting and construction, and the division's commitment to maintaining the maximum level of system capacity, will be provided in the update of the *Comprehensive Solid Waste Management Plan* (Comp Plan), currently in progress. The Comprehensive Plan will also consider strategies to best utilize landfill capacity.

Ordinance 14971 also stipulated that the Transfer Plan undergo an independent, third-party review. This review was conducted by the consulting firm Gershman, Brickner & Bratton, Inc. (GBB) in association with MSW Consultants and R.L. Banks and

Associates, Inc. The third-party review provided an in-depth analysis of the recommendations in the Transfer Plan, along with some suggestions for further examination by the division. In general, the third-party review supports the primary objectives of the Transfer Plan. In particular, the review supports the modernization of the transfer system; maximizing the capacity, and hence the lifespan, of Cedar Hills as long as feasible; studying the benefits and timing of contracting for disposal of part of the county's waste stream before Cedar Hills' closure; working with the private-sector and possibly other jurisdictions to determine the need for one or more intermodal facilities; and considering a range of disposal options once the landfill closes, i.e., waste export by rail to an out-of-county landfill or use of conversion technologies. The third-party review was appended to the Transfer Plan and will help inform decisions made during the update of the Comp Plan.

Although this document addresses the nine issues identified in Ordinance 14971, it is not the last time that the division will consider these issues. The update of the Comp Plan will address these same issues from a longer-term planning perspective. It will integrate the recommendations that were approved in the Transfer Plan and further explore the suggestions made by GBB in the third-party review. When the Comp Plan update is completed and adopted, the division will prepare a new Business Plan to implement the policies established in the plan.

What follows is a discussion of the nine identified issues.

## 1. EMERGENCY CAPACITY

Emergency capacity refers to the ability of the regional transfer and disposal system to handle solid waste after a major catastrophic event. Immediately following such an event, and perhaps for some time after, local and regional transportation networks will likely be disrupted, while municipal solid waste will continue to be generated.

The majority of debris created by a significant event, such as a major earthquake, will be recyclable materials such as concrete and metal. Debris from smaller events, such as woody debris from windstorms, is also often recyclable. Revised Code of Washington (RCW) 70.95.010 (8) states,

The following priorities for the collection, handling, and management of solid waste are necessary and should be followed in descending order as applicable:

- (a) Waste reduction;
- (b) Recycling, with source separation of recyclable materials as the preferred method;
- (c) Energy recovery, incineration, or landfill of separated waste;
- (d) Energy recovery, incineration, or landfill of mixed municipal solid wastes.

King County Code Title 10 requires recycling whenever possible:

**10.14.020 County goals.** It is King County's goal to achieve zero waste of resources by 2030 through maximum feasible and cost-effective prevention, reuse [and] reduction of solid wastes going into its landfills and other processing facilities. It is recognized that waste reduction and recycling are the highest priority of the viable solid waste management options, and the county

hereby adopts this goal, which will be aggressively pursued. (Ord. 14811 § 22, 2003; Ord. 7786 § 2, 1986).

Prioritizing the recycling of disaster debris will maximize capacity for municipal solid waste.

### **Transfer Capacity**

Emergency transfer capacity is the ability to store solid waste in the transfer system for up to three days before transport for disposal. As the division implements the Transfer Plan, emergency capacity in the county's transfer system will be greatly expanded. Transfer capacity is also significantly interrelated with system reliability (issue 2, discussed below).

The four new transfer stations identified for construction in the Transfer Plan will all be designed with a push-pit receiving floor. The push-pit design is an upgrade from the current design of most of the older urban transfer stations, where garbage is dumped directly into transfer trailers parked in chutes below the tipping floor. With this older design, capacity is limited by the number of transfer trailers that are available and can be stored on the site. Any transportation disruption that prevents the delivery of empty transfer trailers can shut down the transfer station. In contrast, with the push-pit design, garbage is unloaded onto a receiving floor and then loaded into one or more compactor chutes. From the compactors, garbage is loaded into transfer trailers or containers. Storage capacity at the facility then includes the space on the receiving floor, as well as the number of transfer trailers or containers that are available and can be stored on site. With the installation of compactors, the capacity of each transfer trailer or container will be increased from about 18 tons to approximately 27 tons. In addition, the new transfer stations will likely be located on larger parcels of land, so will have more storage capacity on site for transfer trailers or containers. The new transfer stations will meet the industry standard of being able to store three days' worth of their service areas' normally generated municipal solid waste on site.

The Shoreline Recycling and Transfer Station (formerly the First Northeast Transfer Station), which opened in February 2008, and the Enumclaw and Vashon transfer stations, both built in the 1990s, were all constructed with the push-pit design and compactors and meet the three-day emergency storage standard.

### **Disposal Capacity**

Emergency disposal capacity is the ability to dispose of waste regionally after the occurrence of a major catastrophic event. There is regional consensus that limited disposal capacity exists in western Washington. Both Seattle and Snohomish County export waste to landfills east of the Cascade mountains and neither has maintained disposal capacity of their own. Representatives from all of the jurisdictions identified Cedar Hills as the best available option for emergency disposal capacity for the Puget Sound Region.

The division has assisted other jurisdictions with short-term disposal capacity. Most recently, the division used its trailers to haul waste from Snohomish County's transfer station to Cedar Hills during short-term rail disruptions.

In addition, the division is beginning its update of the *Cedar Hills Site Development Plan* (the Cedar Hills Plan) in 2008. This plan will provide a capacity analysis of Cedar Hills, which can be used to revise the projected landfill closure date. The Transfer Plan preliminarily identified a number of alternatives for extending the life of the landfill, including examining options for the future development of new disposal areas and regrading some areas, which will increase capacity. These will be examined in detail in the Cedar Hills Plan. Suggestions made by GBB in the third-party review, such as constructing walls around refuse areas to allow filling to occur along the sides of the landfill, and reducing the 1,000-foot buffer around the perimeter of the landfill, will also be part of the analysis.

When the Cedar Hills Plan is complete, the division will evaluate whether to set aside some portion of Cedar Hills for long-term emergency regional municipal solid waste disposal capacity. Disposal of material other than municipal solid waste will not be considered, as existing disaster plans and county policy uniformly support recycling of other debris, such as building materials, green waste and hazardous waste.

The division plans to convene a working group of interested jurisdictions to explore the feasibility of a cost-sharing arrangement to secure long-term emergency capacity for the region as a whole. In addition, the division is already a participant in the Urban Area Security Initiative (UASI) planning process. UASI is composed of King, Pierce, and Snohomish counties and the cities of Seattle and Bellevue. The group has completed a draft disaster debris management plan, which is currently under revision. Consistent with recommendations from the Federal Emergency Management Act (FEMA), the UASI plan says, "In the event of a disaster, waste reduction and recycling must be attempted as long as human health and the environment can be preserved." The division will continue collaborating with other jurisdictions to discuss how emergency disposal capacity should be addressed after the closure of Cedar Hills.

The division will continue to monitor feasible and developing disposal technologies. Emergency capacity and ability to respond in an emergency will be among the criteria used to select a disposal method when Cedar Hills closes. A complete list of selection criteria will be developed as part of the Comp Plan update.

## **2. SYSTEM RELIABILITY**

System reliability combines capacity with the structural integrity of a transfer station to withstand seismic, wind, and snow events. All of the transfer stations were constructed to comply with applicable building standards at the time they were built, and were grandfathered in their current conditions. With the passage of time, building standards have become more stringent.

There are two standards for the structural integrity of facilities: 1) the life safety standard, and 2) the FEMA structural integrity standard. Currently, all urban transfer stations have been upgraded to meet the life safety standard. Under this standard, in the event of a disaster, stations should not endanger their occupants. The stations may, however, be so severely damaged that they cannot be immediately occupied and continue to function.

With implementation of the Transfer Plan, all urban transfer stations will meet the higher standard of structural integrity developed by FEMA. Because transfer stations are considered mission critical facilities in disaster preparedness, new facilities will be designed to the higher FEMA standard so that stations could be occupied immediately following an event to provide critical municipal solid waste disposal services. This has already been accomplished at the new Shoreline Recycling and Transfer Station (Shoreline Station).

System reliability will continue to improve as construction of each transfer facility is completed. The division plans to begin construction of the new Bow Lake Recycling and Transfer Station in 2008. Construction of the new Factoria Recycling and Transfer Station is scheduled to begin in 2011. The new transfer facilities in the Northeast Lake Washington and South County areas will require a comprehensive siting process. Their construction is expected to begin in 2014 and can occur simultaneously. The division is committed to closing no more than one transfer station at a time during construction in order to preserve system reliability in the short-term. Planned permanent station closures will not occur until all new facilities are completed.

The scope of the Transfer Plan was limited to the urban transfer system. The Comp Plan update will look beyond the urban transfer system to analyze the rural transfer system. That analysis will be integrated with the recommendations from the Transfer Plan to provide a system-wide approach to transfer service. Specific to the question of reliability, the Comp Plan will apply the new standard of structural integrity to the rural transfer stations, Vashon and Enumclaw, and consider reliability issues for its other rural facilities, the Cedar Falls and Skykomish Drop Boxes.

### **3. EFFORTS TO COORDINATE PLANNING AND OPERATION WITH OTHER JURISDICTIONS**

The division has benefited from the input of its advisory committees, as a member of the regional and national solid waste community, and through cooperation with other jurisdictions. The Transfer Plan was prepared by the division in collaboration with the Solid Waste Advisory Committee (SWAC), Metropolitan Solid Waste Management Advisory Committee (MSWMAC), and Interjurisdictional Technical Staff Group (ITSG), with direct input from labor and the haulers. SWAC membership is balanced geographically and includes those who receive solid waste services and local elected officials, as well as representation from public interest groups, a marketing expert, labor, recycling businesses, a manufacturer located in King County, and solid waste collection companies. MSWMAC consists of elected officials and staff appointed by the suburban



cities. Nineteen of the thirty-seven cities that are part of King County's solid waste system currently have appointed representatives to MSWMAC. All thirty-seven cities are encouraged to appoint representatives to MSWMAC. The ITSG consists of division, council and cities staff, and provides support to MSWMAC as assigned. SWAC, MSWMAC and ITSG have continued to advise the division on development of the Comp Plan update.

In addition to working with the advisory committees, the division is an active participant in a number of regional and national groups including the state Solid Waste Advisory Committee (state SWAC) and the Solid Waste Association of North America (SWANA). The state SWAC advises the Washington State Department of Ecology on legislative issues, solid waste rulemakings, state solid waste plan development, and Ecology's prioritization of its solid waste programs; the Division Director holds the position representing "Westside Counties" on the state SWAC. The division has also been an active participant in SWANA, an organization that meets regularly to discuss both national and regional solid waste issues. As a participant in UASI, the division has worked to develop a regional plan for handling debris during a regional emergency or disaster. The division will continue to play a role in these organizations and coordinate with other involved jurisdictions.

Implementation of the Transfer Plan will require close coordination with local communities affected by closure of facilities and construction of new facilities. During the closure and construction of the Shoreline station, the division worked closely with Snohomish County and the north end cities to assure that north county residents were well served. The division entered into agreements with the cities of Bothell, Kenmore, Lake Forest Park and Shoreline to provide mitigation funds and quarterly construction progress reports. Snohomish County agreed to accept waste from commercial and self-haulers from the Shoreline service area. That waste was processed through Snohomish County's transfer system, and then transported by the division to Cedar Hills.

The Comp Plan will further examine the possibility of partnering with other jurisdictions on intermodal and disposal options after Cedar Hills closes. During the implementation of the Transfer Plan and development of the Comp Plan, the division will continue conversations and coordination with other jurisdictions including the City of Seattle; Pierce, Snohomish, and Kitsap counties; the Washington State Department of Ecology; and Public Health—Seattle and King County.

#### **4. POSSIBLE IMPACTS OF FUTURE SYSTEM CHOICES ON EMPLOYEES**

Based on the approved Transfer Plan, the division is planning on-site reconstruction of two transfer stations, Bow Lake and Factoria; construction of two new stations in the Northeast Lake Washington and South County areas to replace Houghton and Algona, respectively; and closure of the Renton transfer station. This process is scheduled for completion in 2016. While the end result will be one less transfer station, changes to

the transfer system will be phased in as individual stations are completed, so staff impacts will be gradual.

As older transfer stations are replaced by larger, modern facilities with more complex operations and additional recycling services, more staff will be required to operate them. At the new Shoreline station, total staff was increased by four. This trend will be at least partially offset by a reduction in the need for truck drivers as increased compaction reduces the number of loads that must be transported to a disposal site. The division will also monitor changes in equipment that may affect the number or type of maintenance staff required. For example, fewer trucks, but more complicated transfer station systems might not affect the total number of staff required, but could affect what those staff do. During the transfer station siting, design and construction phase, the division will need to hire temporary engineering staff.

Over the long-term, closure of the Cedar Hills landfill will affect staffing levels associated with landfill operations. The division has at least eight years to plan for these staffing changes through attrition and career retraining programs for employees.

The division is committed to examining the effects on employees as part of the planning process, and to providing choices for making transitions, if necessary.

## **5. STRATEGIES TO ENCOURAGE COMPETITION**

Competition in a solid waste system is generally seen as a way to encourage high-quality and innovative services at the best price for the ratepayer. In some cases, regulations limit who can provide certain services, for example, under state law King County does not have the authority to collect waste at the curb or contract for curbside collection services.

In King County, in jurisdictions that contract for solid waste services, a number of private-sector companies compete to provide collection services for solid waste and recyclables. Everywhere in the county, private-sector companies compete to provide collection services for construction and demolition debris (C&D); recyclables and C&D transfer and processing; and C&D disposal. It is expected that this will continue to be the case in the future.

The division owns and operates a network of transfer facilities and transports waste from those facilities to Cedar Hills for disposal. While the division will continue to own and operate the transfer facilities, and transport the waste for disposal, when Cedar Hills reaches capacity and closes, the division will no longer own or operate a disposal facility.

With approximately one million tons of solid waste annually, there has been considerable interest from the private sector in handling the county's waste after Cedar Hills closes. There are three national disposal companies with competitive landfill capacity within one day's rail haul, and additional potential competitors farther away.

The division will also continue to monitor and evaluate other waste disposal options, including conversion technologies, which may provide even more opportunities for competition. The decision of who would own and/or operate an intermodal facility will be made when the need for and type of facility are determined.

Consistent with the Transfer Plan, the division will consider issuing a Request for Proposals to determine the feasibility of diverting approximately 20 percent of the county's waste from disposal at Cedar Hills to another disposal option; as suggested in the third-party review, amounts greater than 20 percent will also be evaluated. This process will enable the division to offer competitive opportunities and to assess what options for disposal may be available. By contracting early for disposal of part of the county's waste, companies will be bidding against the county's cost for landfill disposal as well as other public and/or private sector bids. For both waste diversion and for disposal after Cedar Hills closes, the division will consider partnering with other jurisdictions to combine waste to encourage greater competition.

The division also works to encourage private sector involvement in waste materials processing through programs like LinkUp. LinkUp is a program to expand markets for selected recyclable and reusable materials by facilitating an interactive community of businesses, public agencies and other organizations.

## **6. PRESERVING SERVICE LEVELS AND VALUE FOR CUSTOMERS**

Providing efficient services and ensuring the best value for customers is the foundation on which the Transfer Plan is based, and is a principal focus of the Comp Plan update process. The Transfer Plan provides for a transfer system that is well dispersed throughout the county, maximizes station capacity, reduces customer travel costs, and reduces wait time for both self-haul and commercial users. The third-party review strongly supports the modernization of the transfer station system, and is supportive of the number and distribution of the urban transfer stations relative to the size and population density of the county. The Comp Plan will analyze the transfer system's ability to meet the needs of rural customers as well, integrating the results of that analysis with the recommendations in the Transfer Plan. Some transfer stations that were evaluated in the Transfer Plan serve both urban and rural customers. These will be subject to a second review in the development of the Comp Plan. The Comp Plan update will also integrate the transfer station siting process that was developed in collaboration with SWAC and MSWMAC as part of the Transfer Plan to ensure that new stations are appropriately sited to minimize neighborhood impacts while maximizing system efficiency.

Transfer stations will be built to meet the level-of-service requirements developed in the milestone reports that led up to the Transfer Plan, including:

- flexibility to provide a range of solid waste and recycling services
- improved traffic queuing
- cost-effective, state-of-the-art technologies
- compactors to compress solid waste and reduce truck traffic

- the ability to accommodate regional population growth and industry changes

Each of the planned stations, Bow Lake, Factoria, Northeast Lake Washington and South County, will be designed to the same high standards as the new Shoreline Station, while responding to the specific needs of the communities that they will serve. For example, the division has worked extensively with the City of Bellevue to identify and acquire property adjacent to the existing facility that will allow construction of a state-of-the-art transfer facility that will be compatible with the city's desired land uses in that area.

Current division policy is to continue providing self-haul service at the transfer stations; the third-party review agreed with this policy. Consistent with the third-party review, the division will consider various fee structures, such as a transaction fee, to better distribute the cost of providing that service. Analysis of, and recommendations on, this issue will be presented in the Comp Plan.

The Transfer Plan presents a fiscally responsible package that has a greater initial capital investment, but lower operating costs over the long-term, than the other alternatives considered during the planning process. The third-party review comments that the capital cost projections for the new transfer stations appear high. GBB offers two possible solutions. One is to install waste compactors at only some of the stations. The third-party review recognizes that although this option would reduce upfront costs, it might not be cost-effective overall. Division analyses validate that this would not be a feasible solution in terms of operational costs and long-term efficiency, as it would require uncompacted waste from one transfer station to be transferred to another station with a compactor before being transported for disposal to avoid excessive transport costs. The second proposed solution is to explore value engineering to reduce capital costs. Value engineering is a method of examining the function of a facility, project, service, etc., with a goal of reducing cost without compromising performance. The division will use value engineering where appropriate to validate and/or reduce costs and will pursue alternative procurement methods, such as design-build contracts, to reduce expenditures.

The division is committed to disposal fees that continue to be low and stable. Currently, disposal at Cedar Hills provides the most cost-effective method of disposal for the county's waste. The third-party review supports extending the life of this valuable asset for as long as possible. With the revision of the Cedar Hills Plan, the division will explore ways to extend the life of Cedar Hills and the associated value of continuing to operate Cedar Hills beyond the currently projected 2016. As well as on site changes, such as developing new disposal areas, the division will pursue expanding the amount of waste removed from the waste stream through waste prevention and recycling, and, as previously discussed, will consider diversion of approximately 20 percent of the county's waste from disposal at Cedar Hills to another disposal option.

Because technologies are changing rapidly, and costs can fluctuate significantly over time, it has not been feasible to predict with any certainty what the most efficient,

environmentally sound, cost-effective, and publicly acceptable disposal alternative might be when Cedar Hills closes. The division will continue to monitor conditions and technologies closely. The Comp Plan will incorporate criteria with which to evaluate disposal options after Cedar Hills closes, and for diversion of waste from Cedar Hills before closure.

The third-party review recommends a "Full Cost Management Study" and implementation of "Activity Cost Management" to help manage and control costs. The division tracks a wide range of detailed information, including cost and other data. These data are organized to allow supervisors and managers to track day-to-day operational costs and activities. Because of the current organization of data, it is possible, but not necessarily easy, to compile the information for certain uses, such as determining the cost per ton per station.

In the past, the division undertook projects such as those suggested in the third-party review, and in 2001 successfully completed an activity based costing analysis and related benchmarking study. That study, along with the 2004 Business Plan, resulted in a more business-oriented approach to providing services.

As part of the division's ongoing work in this area, and to further increase the accessibility and use of data, the division has begun a Business Intelligence Program to address the need for more easily accessible business information. This program follows the guidelines set forth in the King County Strategic Technology Plan 2006-2008. The division anticipates being able to access data so that it can be organized to report on a wide range of broad or specific activities, sites, and systems, for the purpose of managing for more long-term decisions and tracking costs in a more comprehensive manner.

King County Executive Ron Sims has committed to keeping increases in the cost of disposal at or below the rate of inflation for as long as Cedar Hills continues to operate. The division's new rate increase, which took effect January 1, 2008, is the first since 1999. It will fund construction of the Bow Lake and Factoria Transfer Stations without compromising the Executive's commitment. Through the Comp Plan process the division will work with stakeholders to further address the division's financial policies.

## **7. INTEGRATION OF FUTURE DISPOSAL CHOICES WITH THE TRANSFER NETWORK**

While the current approved Comp Plan and the approved Transfer Plan both anticipate moving to waste export after Cedar Hills' closure, implementation is at least several years in the future. Until that time, the division will continue to monitor proven and developing technologies and consider the range of options for disposal, including waste to energy conversion. When the time comes to contract for disposal once Cedar Hills closes, bids proposing a variety of disposal methods may be considered.

The decision on the need for, and the type of, intermodal facility will be made no more than five years before Cedar Hills' closure. The division will continue to monitor local

intermodal capacity until that time. The division will retain the Harbor Island property as a potential option for an intermodal site or other use, should it be needed, while continuing to lease the property for other uses.

Regardless of how the county disposes of its solid waste, a transfer station system will be required. Transfer stations are the public face of the solid waste system, and provide vital local services to both commercial and self-haul customers through nearly one million transactions each year. At these facilities, many smaller garbage loads are consolidated into fewer, larger loads for transport and disposal. Transfer facilities provide local service, collecting garbage close to where it is generated rather than requiring a longer haul to a central facility. This reduces collection costs, which is directly reflected in curbside collection rates.

Under the approved Transfer Plan, facilities will be dispersed throughout the county to provide for convenient disposal of solid waste and collection of recyclable materials. For new transfer stations, the siting process will ensure the best possible location is chosen, considering traffic, and other environmental and community impacts.

## **8. ENVIRONMENTAL PROTECTION**

The purpose of a regional transfer and disposal system is to protect environmental quality and public health and safety through the safe handling of solid waste. Convenient, cost-effective service helps ensure proper solid waste management, while protecting the environment.

For the *Preliminary Transfer and Waste Export Facility Recommendations* report, an environmental impact statement (EIS) was prepared to evaluate each transfer system alternative and waste export decision in terms of transportation, noise, air quality and odor, energy, land and shoreline use, and public services and utilities. The EIS did not identify any significant unavoidable adverse impacts associated with the proposed recommendations, which were later approved in the Transfer Plan. Project specific documentation will be prepared to comply with the State Environmental Policy Act (SEPA) for the siting of new transfer facilities, new construction, and major improvements that result from the approved Transfer Plan. Significant changes to the planned transfer system and/or alternatives to waste export would require a new EIS.

On October 15, 2007, King County Executive Order PUT 7-10-1 (AEO) "Evaluation of Climate Change Impacts through the State Environmental Policy Act" took effect. The order directs all King County departments to require that climate impacts, including but not limited to those pertaining to greenhouse gases, be appropriately identified and evaluated when such departments are acting as the lead agency in reviewing the environmental impacts of private or public proposals pursuant to SEPA. As a result, greenhouse gas production will be included in all environmental impact assessments performed by the division.

Transfer stations and all associated buildings, such as scalehouses, will be built to meet the standards developed in the national rating system called Leadership in Energy and Environmental Design<sup>R</sup> (LEED). LEED incorporates indoor environmental quality, materials and resources, energy and atmosphere, water efficiency, and sustainable sites in its rating criteria. The standards set by LEED will be incorporated from the planning through the construction phase of all projects. The new Shoreline Station is expected to receive a LEED Gold rating as a result of green features such as solar panels and rainwater harvesting.

New transfer stations will have expanded recyclables collection areas and services. Expanded recycling at the new Shoreline Station includes yard waste, clean wood, scrap metal, and household batteries. Phased acceptance of other recyclables, such as fluorescent lights, is planned for spring 2008.

The third-party review suggests operational improvements to promote environmental sustainability. Regarding their suggestion to use clean fuel, in 2007 the division switched all diesel run vehicles to the use of B20 fuel during the warmer months. B20 is an ultra-low-sulfur diesel mixed with 20 percent biodiesel, a vegetable oil, which produces a cleaner burning fuel and reduces the emission of greenhouse gases. The division has been using B5 fuel (a 5 percent biodiesel mixture) since early 2005 and continues to use B5 during the winter. The division's Environmental Management System continually reviews operating practices to ensure environmental impacts are minimized.

The division makes every effort to reduce truck traffic on the roads by maximizing the use of each transfer trailer that leaves a station. As the division installs waste compactors at more transfer stations, the amount of truck traffic, and resulting emissions of greenhouse gases and other pollutants, will decline.

The division's mission to protect human health and the environment is evident at Cedar Hills, which has received national recognition from SWANA – a gold award for the landfill gas collection system and a bronze award for overall landfill management. The division has contracted with Virginia-based Ingenco, which plans to generate pipeline-quality gas from the methane gas collected at the Cedar Hills landfill. Ingenco will market the gas through the natural gas pipeline adjacent to the landfill. Division employees will continue to operate the landfill gas collection system. The contract with Ingenco guarantees the division an annual payment of \$1.3 million, and will convert what has been a wasted resource into usable energy. Start up is planned for January 2009.

## **9. THE POTENTIAL BENEFITS OF A FEDERATED SYSTEM**

As provided by RCW 70.95.020, local government – cities and counties – has statutory oversight and authority for the planning and handling of solid waste. Currently, through Interlocal Agreements (ILAs) between King County and thirty-seven cities, the division is responsible for operation of the public transfer stations and the regional landfill, as well

as the development of the Comp Plan for the federated solid waste system. The ILAs provide the basis for the development of system and facility plans based on an assured level of tonnage to county facilities from the cities. The current ILAs expire in 2028.

The approved recommendations presented in the Transfer Plan are based on analyses conducted by the division with input from SWAC and the cities through MSWMAC and ITSG. The collaboration and consensus building that went into the Transfer Plan exemplify the commitment among the participants to develop an efficient regional system for solid waste management.

Collaborating on services and programs with the thirty-seven cities that participate in the county's regional system allows ratepayers to benefit from economies of scale. Both railroads and waste disposal (including energy conversion) companies offer pricing incentives based on volume of waste. In some cases, minimum waste guarantees may even be required. When contracting with the railroads and with disposal companies, larger volumes of solid waste will result in reductions in per ton costs. The potential for duplication or overlapping services is also minimized through a federated system.

A coordinated program is more efficient than thirty-seven separate programs, and transfer facilities are not needed in every city. The current system of disposing of all waste at a single large landfill developed because it was more efficient than maintaining numerous smaller landfills throughout the county. Similarly, other disposal systems are more efficient when capital projects are scaled to meet regional, rather than localized, needs. A federated system allows the division to build fewer, strategically placed facilities of sufficient size, resulting in a more cost-effective network for solid waste and recycling overall.

For many years, the division and the cities have been coordinating programs and services to increase waste prevention and recycling throughout the region. While the cities and county share responsibility for planning and developing waste prevention and recycling programs, the cities have primary responsibility for implementing programs in their jurisdictions. The division has already begun working with SWAC, MSWMAC, and ITSG to set new waste prevention and recycling goals and strategies that will be incorporated into the Comp Plan, scheduled for completion in 2009.

## **NEXT STEPS**

This document addresses the nine issues identified in Ordinance 14971, however, the division will continue to consider these and other issues in future planning efforts. The planning process that has been used to date, with input from SWAC, MSWMAC and ITSG, commercial solid waste haulers, King County Council staff, the division's labor union representatives, and division employees, will continue. Each step of the planning process builds upon the analyses and recommendations in work that has already been completed.



Throughout 2008 the Comp Plan update process will continue. The Comp Plan will address many of these issues from a long-term planning perspective, and will integrate the recommendations approved in the Transfer Plan, as well as address the rural transfer system, and further explore the suggestions made by GBB in the third-party review. The completed Comp Plan will provide the policy and vision for management of the region's solid waste over the next twenty years. Also in 2008, the division will update the Cedar Hills Plan, which will provide a technical analysis of Cedar Hills' capacity.

When a new Comp Plan has been adopted, the division will prepare a new Business Plan to implement the policies established in the updated Comp Plan. In addition to a new Business Plan, the division will develop an updated Operational Master Plan. The Operational Master Plan will integrate the results of the Comp Plan, the Transfer Plan and the Cedar Hills Plan as they relate to planned capital improvements.

It is anticipated that briefings and reports to the King County Council on policy-related issues will be needed during the development of the Comp Plan update, and during analysis of alternatives for disposal of any portion of the county's waste at a location other than Cedar Hills.