

April 6, 1992
92-43.MOT (BD:clt)

Introduced by: Paul Barden

Proposed No.: 92 - 43

MOTION NO. 8591

A MOTION authorizing the executive to issue a Request for Proposal for the sale of, or collection rights to, landfill gas at the Cedar Hills Landfill, and authorizing the executive to execute the resulting contracts and leases.

WHEREAS, the King County Cedar Hills Landfill is producing substantial quantities of methane gas, which is currently being flared, and

WHEREAS, it is in the public interest to obtain use and revenues from an otherwise wasted product, and

WHEREAS, K.C.C. 4.56 provides for the sale and leasing of both real and personal property;

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

A. The methane gas being produced at the Cedar Hills Landfill is declared surplus.

B. The King County executive is hereby authorized to issue a Request for Proposal (RFP), in substantially the form of the one attached, and such RFP shall:

1) Solicit only electrical energy conversion proposals in recognition that the Northwest needs new sources of electrical energy; and

2) Give weight in the selection of a proposal to the proposers' willingness and ability to mitigate traffic, noise and other impacts on the community from the design, construction, and operation of a facility.

C. Final selection of purchaser/lessee and the resulting contract/lease shall be subject to the review and approval of the Council.

1 D. Income earned from this project shall be used solely
2 for mitigation impacts related to the Cedar Hills Landfill.

3 PASSED this 16th day of April, 1992

4 KING COUNTY COUNCIL
5 KING COUNTY, WASHINGTON

6 *Audrey Dreyer*
7 Chair

8 ATTEST:

9 *Ronald G. Peterson*
10 Clerk of the Council

PROPERTY LEASE/SALE RFP OUTLINE
LANDFILL GAS ENERGY CONVERSION PROJECT

I. BACKGROUND

King County (the County) is a municipal corporation and a political subdivision of the State of Washington. The County, through its Solid Waste Division, operates the Cedar Hills Regional Landfill (the "Landfill"). The Landfill produces a substantial amount of methane and other landfill gases which are currently being flared by the County. The County, through this request for proposals (RFP) from parties interested in purchasing the landfill gas or leasing the rights to mine it, hopes to have the landfill gas converted to a useful form of energy or product and to receive compensation commensurate with the value of rights leased or gas purchased.

II. SYNOPSIS OF REQUEST FOR PROPOSALS

A. The County is planning to sell gas and/or lease certain property interests for the end purpose of converting landfill gas to a useful form of energy or product. The County will consider either of the following kinds of proposals:

1. Proposals to: (a) lease the right to interface with and use the County's existing landfill gas extraction and collection system and possible future expansions thereof to extract the landfill gas; and (b) at the proposer's option, to lease a parcel of land on the perimeter of the Landfill on which the lessee may build and operate a facility to convert landfill gas to a useful form of energy or product. As an alternative to leasing Landfill property to build a facility, the proposer may arrange right of way and pipe or otherwise transport landfill gas off site to a remote location for conversion. Under any arrangement, the County will control, maintain, and operate the landfill gas extraction and collection system.

or

2. Proposals to: (a) purchase landfill gas collected by the County's existing landfill gas extraction and collection system and possible future expansions thereof; and (b) at the proposer's option, to lease a parcel of land on the perimeter of the Landfill on which the lessee may build and operate a facility to convert landfill gas to a useful form of energy or product. As an alternative to leasing Landfill property to build a facility, the proposer may arrange right of way and pipe or otherwise transport landfill gas off site to a remote location for conversion. Under any arrangement, the County will control, maintain, and operate the landfill gas extraction and collection system.

B. The purchase/sale and/or lease agreement will be preceded by the sale of: (1) an option to purchase the landfill gas or lease the right to interface with and use the County's landfill gas extraction and collection system to mine the gas for a fee of \$175,000; (2) an option to lease a parcel of land on the perimeter of the Landfill to build an energy conversion facility for a fee of \$25,000. The option fees will not be refunded if the options are not exercised, but 100% of the option fees will be applied to the purchase and/or lease obligations if the options are exercised.

C. The option(s) will be negotiable to allow the successful proposer a reasonable period of time to conduct any required environmental review and to conduct any other preparatory work before exercising the option(s) and commencing construction.

D. The term of the lease and/or purchase agreements will be negotiable up to a maximum of thirty-five (35) years.

E. The lease and/or purchase agreements may contain, subject to negotiation, lessee rights to sell, assign, or sublease.

III. LANDFILL DESCRIPTION, USE PLANS, CONSTRAINTS

A. **Description.** The Landfill is operated by the County. It is located in south central King County, about four miles south of Issaquah and six miles east of Renton. It is about 920 acres in size. A map and a description of four possible areas where an energy conversion facility might be sited are attached to the RFP and labeled as Exhibit 1 and Exhibit 2. Identified on the map are: the existing and planned fill areas; existing landfill operational structures, including the existing flare; Bonneville and Puget Power electrical power transmission easements; Northwest Pipeline gas pipeline easement; buffer zones, used to buffer the neighboring residential properties from landfill development and operations; and areas where the County would consider leasing land for the construction of an energy conversion facility. (Please note that one of the four areas identified on the map is in the buffer zone. Its possible use for an energy conversion facility is contingent upon the County amending the development plan for the Landfill and upon the County's land use agency approving an amendment to the conditional use permit, which allowed the original construction of the Landfill and constrains any future construction activity on the site. Decisions about possible amendments to the conditional use permit and to the development plan are one to two years away.)

B. **Use Plans.** The Landfill is the primary landfill serving the waste shed encompassing unincorporated King County and all cities except Seattle and Milton. It serves a population of about one (1) million people. The Landfill currently receives about one (1) million tons of solid waste per year. A table displaying the projected waste tonnage is attached to the RFP as Exhibit 3. The table assumes the Landfill would be used until 2022 as the primary Landfill for the geographic area served by the County's Division of Solid Waste. Though it has no immediate plans to dispose of waste in any other way, the County is studying alternatives that could diminish the use of Landfill and probably will include, subject to negotiation, in any purchase/sale agreement(s) the right to diminish or terminate the use of the Landfill early if the County chooses to long haul waste to a remote location or to otherwise handle waste differently than it is handled now. A table displaying the estimated waste composition breakdown is attached to the RFP and labeled Exhibit 4. Exhibit 3 and Exhibit 4 are provided for information only, and the County makes no representations or warranties regarding their accuracy.

C. **Ownership of Land.** The land on which the Landfill is built is currently owned by the Washington State Department of Natural Resources (DNR) and leased to the County. The DNR plans to convey title to the property to the County by early 1992 pursuant to an enabling law passed by the Washington State Legislature and enacted into law in 1991. Although the County anticipates having title to the property with no encumbrances that would affect the lease and/or purchase arrangements contemplated by this RFP, the execution of such agreements will be contingent upon the securing title to the Landfill. Note: If conveyance of title occurs before the RFP is advertized, the above language will be modified.

D. **Other Descriptive Information/Constraints.** The County's landfill gas extraction and collection system is designed and operated for the primary objective of controlling gas migration, odors, air emissions, and the attendant environmental, health, and safety risks. Any lease/purchase

agreement(s) will have to ensure that the primary objective is not compromised.

Consistent with that primary objective, the County is considering possible modifications to its gas extraction and collection system to reduce the risk of gas migration. Prospective lessee/purchasers will be provided more information about the kinds of changes contemplated upon request.

IV. CONTENTS OF PROPOSALS

A. Kind of Agreements Proposed. Explain whether you are proposing to purchase landfill gas or proposing to lease the right to interface with and use the County's gas extraction and collection system to extract the gas. Explain whether you are proposing to lease a parcel of land on which to build an energy conversion facility.

B. Kind of Facility and End Product. Explain the end product(s) contemplated and the kind of facility(ies), if any, and process(es) that would be used to convert landfill gas to the end product(s).

C. Description of Facility. If you propose building an energy conversion or other facility on landfill property, describe the proposed facility in sufficient detail for the County to preliminarily assess the nature and magnitude of potential environmental impacts. Include:

1. Schematic drawings showing building footprint plus needed parking, buffering and access;
2. Height of building, including any smoke stacks;
3. Preferred location, within the limited options presented on the map provided by the County;
4. Anticipated kind and level of noise generation and planned noise mitigation;
5. Traffic impacts from ongoing operations;
6. Nature and magnitude of air emissions and any other emissions such as gas condensate, scrubber waste, etc.; and
7. Production capacity of facility (e.g., 15 mgw electrical power plant).

D. Alternative Fuel Tax Credit. If you plan to take advantage of the Section 29 alternative fuel tax credit provisions of the federal tax code, explain how and to what extent you expect to benefit from the tax credit.

E. Capital and Operating Costs. Provide and explain your projected one time capital costs and your projected annual operating costs.

F. Financing. Explain plans for financing the design and construction of any energy conversion facility, including the portion, if any, that will be debt financed, the prospective lender(s), the assumed interest rate, and amortization schedule.

G. Purchaser(s) of End Product. List and explain the status of any planned arrangements with prospective purchaser(s) of the energy and/or products to which you propose converting landfill gas.

H. Company Experience. List your experience: (a) developing and/or operating landfill gas energy conversion facilities; (b) if you are an electrical utility company, your experience developing and/or operating natural gas fired power generation facilities or facilities with similar characteristics; or (c) any other directly related experience. Provide at least one reference and current telephone number for each project/facility listed in your experience.

I. Individual Experience. List all project members who would be involved in your proposed project, explain their roles, and describe their experience.

J. Proposed Compensation to County. Although the ultimate compensation amount and form will be subject to negotiation and will depend, in part, on other terms and conditions, provide your preliminary compensation proposal using the following assumptions and expressed in the following way: (1) assume the Landfill will be used until 2022; (2) assume the quantity and composition of solid waste will be as presented in Exhibits 3 and 4; (3) assume your proposed landfill gas conversion facility would commence operating at the beginning of 1995 and would operate under a thirty five year lease or purchase agreement until the end of 2029; (4) express your proposal in dollars per 100,000 btu's of landfill gas and a total for life of lease or purchase agreement (present value discounted to 1992 with an explanation discounting of your assumptions); and (5) any qualifications or explanation of assumptions you wish to provide.

V. RESPONSIBILITIES OF PROSPECTIVE LESSEE

A. Hold Harmless/Indemnification. Any lease/purchase agreement will require the lessee/purchaser to indemnify and hold harmless the County, its officers, agents, and employees against any and all claims, judgements, or actions arising from the lessee/purchaser's use of the County's property, the lessee/purchaser's handling or use of the landfill gas, and/or associated activities.

B. Insurance. Any lease/purchase agreement will require the lessee/purchaser to acquire and maintain liability insurance, with King County named as an additional insured, in amounts and with terms to be determined by the County, and which will be commensurate with the nature and extent of the various risks.

C. Environmental Review. The lessee will be responsible for ensuring the completion of any environmental review required under the Washington State Environmental Protection Act (SEPA) and under any other applicable local, state, or federal laws or regulations.

D. Permits. The lessee will be responsible for securing all permits and/or other regulatory approvals required by regulatory agencies with jurisdiction.

E. Damages/Termination of agreement(s) for Failure to Meet Certain Deadlines. The option, lease and/or purchase agreements will require the lessee to meet certain deadlines for completing environmental review, securing permits, starting construction, and commencing periodic compensation payments. The deadlines, liquidated damages amounts, and termination provisions will be subject to negotiation.

F. Reclamation Bond/Other Financial Security. If the lessee constructs any facilities at the Landfill, the lease agreement will require the lessee to purchase and maintain a bond or other financial security instrument to be approved by the County to ensure the removal of lessee facilities and the restoration of the land upon the termination of the lease.

V. SELECTION CRITERIA/PROCESS

Criteria.

1. **Preliminary Indication of Environmental Impact.** A preliminary indication of the construction and ongoing impacts on the surrounding environment will be the first criterion. Because of the County's commitment to protecting the neighboring Cedar Hills residential community from adverse environmental impacts of the landfill and any associated development and operations, this will be a threshold criterion. To receive further consideration, proposals will have to show preliminarily that they will have no significant adverse environmental impacts or that any such impacts will be adequately mitigated. Specifically, proposals will, at least, need to demonstrate preliminarily that: (a) noise from the operation of any energy conversion facility built on County property will not exceed standards set by King County Code 12.88; (b) traffic generated by operation of any energy conversion facility built on County property will not exceed ten (10) round trips per operational; and (c) air emissions generated by operation of any energy conversion facility will not exceed standards set and imposed by the Puget Sound Air Pollution Control Authority.

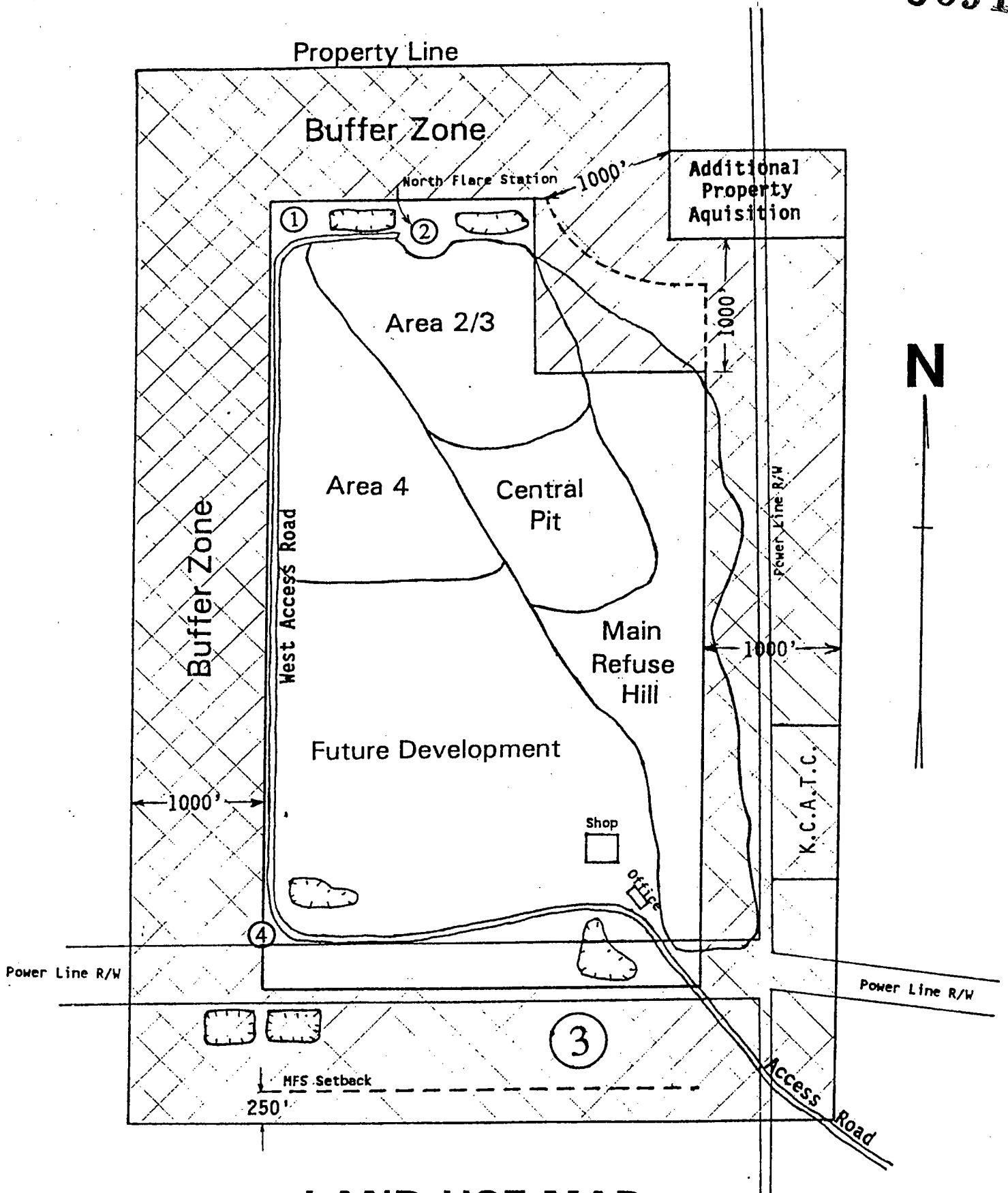
2. **Experience.** Proven success in designing, securing all necessary financing and development approvals, building, and marketing the resulting energy or other product will be the second criterion. Because the County desires to enter into an agreement with a company that presents a high probability of success for the landfill gas conversion project, this also will be a threshold criterion, with further consideration of proposals dependent on demonstrating significant related experience. A major role in developing three (3) or more energy conversion projects will be considered significant related experience for purposes of meeting this threshold criterion.

3. **Compatibility with Neighboring Residential Community.** A preliminary indication of how the lessee would avoid or mitigate negative impacts of an energy conversion facility, including aesthetics, odors, and noise not covered by threshold criterion number one above.

4. **Return.** A preliminary indication of the monetary consideration that the lessee/purchaser may offer the County will be the fourth criterion to be used to select the finalists from the proposals that meet the threshold criteria described above.

Process. The County intends to screen and score the initial written proposals, selecting two to four finalists. The County will then interview and conduct reference checks on the finalists. Following the completion of interviews and references checks, the County will decide which proposers are most responsive to the County's needs, will conduct negotiations with those proposers, and will make the final selection based on an assessment of which of the finalists' offers is most advantageous and suitable to the County's needs.

MW:mw
12-19-91



**LAND USE MAP
CEDAR HILLS REGIONAL LANDFILL**

POTENTIAL SITES FOR A LANDFILL GAS ENERGY CONVERSION PLANT

1. In the northwest corner between the northwest curve of the Access Road, the North Siltation Pond and inside of the Buffer Zone. This site provides good access from the road and is close to the terminus of the Active Gas Collection System at the North Flare Station. However the site is steep and heavily wooded at the present time. Approximately 3.5 acres.
2. Present site of the North Flare Station between the North Siltation Pond and the North Storm Water Lagoon. Good road access at the terminus of the Active Gas Collection System. A level site of approximately 2.5 acres. Construction here may require the relocation of the North Flare Station.
3. In the South Buffer Zone south of the BPA Powerlines Right-of-Way. Excellent road access, isolated from landfill operation, will require installation a pipeline to transmit the gas from the North Flare Station. 5 plus acres which will require revision of the current land use permit to allow construction in the Buffer Zone while maintaining a 250 foot setback from the property line as required by Minimum Functional Standards (MFS).
4. In the southwest corner between the access road the West Buffer Zone and BPA's Right-of-Way. Good road access, will require a gas transmission pipeline to bring the gas from the North Flare Station. A small site limited to about 1 acre.

EXHIBIT 3

Long-Range Disposal Forecast
Through Cedar Hills Closure

	Cedar Hills Landfill	Rural Landfills	Total Disposal *
1991	1,151,510 tons	30,870	1,182,380
1992	970,000	26,810	996,810
1993	938,000	23,610	961,610
1994	923,000	19,210	942,210
1995	860,961	4,500	865,461
1996	862,835	4,500	867,335
1997	855,979	4,450	860,429
1998	840,513	4,450	844,963
1999	816,817	4,400	821,217
2000	785,521	4,350	789,871
2001	787,440	4,450	791,890
2002	815,000	4,600	819,600
2003	843,525	4,700	848,225
2004	873,049	4,850	877,899
2005	903,606	5,000	908,606
2006	935,232	5,100	940,332
2007	967,965	5,250	973,215
2008	1,001,844	5,400	1,007,244
2009	1,036,908	5,550	1,042,458
2010	1,073,200	5,700	1,078,900
2011	1,110,762	5,850	1,116,612
2012	1,149,639	6,000	1,155,639
2013	1,189,876	6,200	1,196,076
2014	1,231,522	6,350	1,237,872
2015	1,274,625	6,530	1,281,155
2016	1,319,237	6,710	1,325,947
2017	1,365,410	6,900	1,372,310
2018	1,413,199	7,100	1,420,299
2019	1,462,661	7,300	1,469,961
2020	1,513,854	7,500	1,521,354
2021	1,566,839	7,700	1,574,539
2022	1,621,679	7,900	1,629,579

* Total does not include yard waste

EXHIBIT 4

8591

WASTE COMPOSITION, KING COUNTY AND SEATTLE COMBINED TOTAL WASTE STREAM

<u>MATERIAL</u>	<u>KING COUNTY</u>	<u>SEATTLE (1)</u>	<u>WEIGHTED AVERAGE (2)</u>
ORGANICS	83.2 %	79.0 %	81.3 %
Paper	29.4	27.6	28.6
Newspaper	5.0	4.2	4.7
Cardboard	7.5	7.0	7.3
Office Paper	1.2	0.6	1.0
Computer Paper	0.4	0.2	0.3
Mixed	8.8	9.0	8.9
Other	6.5	6.5	6.5
Plastics	9.6	6.5	8.2
PET Bottles	0.2	0.1	0.2
HDPE Bottles	0.6	0.2	0.4
Polystyrene	0.8	0.4	0.6
Plastic Packaging	4.3	4.4	4.4
Other	3.8	1.3	2.7
Wood and Yard Wastes	19.6	26.0	22.5
Wood	10.1	14.3	12.0
Yard Wastes	9.5	11.6	10.5
Other Organics	24.6	18.9	22.0
Textiles	4.6	2.7	3.8
Food Wastes	7.0	11.5	9.0
Disposable Diapers	1.9	1.2	1.6
Fines	2.2	0.0	1.2
Rubber	1.8	0.5	1.2
Furniture, Mattress	0.9	0.0	0.5
Miscellaneous Organics	6.2	0.0	3.4
INORGANICS	16.7	21.0	18.6
Glass	2.7	3.6	3.1
Recyclable Glass	2.0	3.4	2.6
Other	0.6	0.3	0.4
Metals	5.3	6.5	5.8
Ferrous Cans	0.9	0.9	0.9
Other Ferrous	2.1	2.5	2.3
Aluminum Cans	0.5	0.5	0.5
Other Alum. Containers	0.2	0.1	0.1
Mixed Metals	1.4	2.2	1.8
Other Non-Ferrous	0.2	0.2	0.2
Miscellaneous Inorganics	8.7	10.9	9.7
Haz./Special Wastes	0.8	0.7	0.7
Medical Waste	0.0	0.0	0.0
Ashes	0.4	0.2	0.3
Construction/Demo. Waste	6.4	9.6	7.8
Miscellaneous	1.2	0.0	0.7
TOTALS	100.0 %	100.0 %	100.0 %

NOTES: 1. From the Seattle Waste Stream Composition Study (Matrix et al 1989).
 2. Weighted average based on 499,600 tons total waste per year in Seattle and
 854,800 tons per year of total waste in King County.

Source: King County Waste Characterization Study, 1990 - 1991.

FISCAL NOTE

~~OKXXXXXX~~ Motion No. PROPOSED

Title: MOTION AUTHORIZING RFP FOR SALE OR COLLECTION RIGHTS TO CEDAR HILLS LAND FILL GAS

Affected Agency and/or Agencies SOLID WASTE DIVISION OF PUBLIC, REAL PROPERTY DIVISION OF DEA

Note Prepared By: ROBERT C. MARTIN, REAL PROPERTY ANALYST, REAL PROPERTY DIVISION

Note Reviewed By: _____

Impact of the above legislation on the fiscal affairs of King County is estimated to be:

Revenue to: SOLID WASTE DIVISION

Fund Title	Fund Code	Revenue Source	1st Year	2nd Year	3rd Year
SOLID WASTE	SEE 2ND PAGE	PUBLIC SALE	\$200,000 (EST)	-0-	SEE 2ND PAGE
TOTAL					

Expenditures from:

Fund Title	Fund Code	Revenue Source	1st Year	2nd Year	3rd Year
SOLID WASTE	SEE 2ND PAGE	SEE 2ND PAGE	SEE 2ND PAGE	SEE 2ND PG	SEE 2ND PG.
TOTAL					

Expenditures by Categories	1st Year	2nd Year	3rd Year
Salaries & Benefits	SEE	2ND	PAGE
Supplies & Services	-0-	-0-	-0-
Capital Outlay	-0-	-0-	-0-
Other	-0-	-0-	-0-

FISCAL NOTE

~~Ordinance~~/Motion Title Motion authorizing RFP for sale or collection rights to Cedar Hills Landfill gas.

Affected Agency/Agencies Solid Waste Division of Public Works, Real Property Division of DEA.

REVENUES IMPACT:

Was revenue estimate included in current years budget? No

Assumptions used in estimating revenue impact include:

Future revenues will depend on response to an RFP regarding utilizing land fill gas. This is an endeavor having little precedent. Results could vary from no response to the RFP to long-term revenues involving millions of dollars. If there is a response to the RFP, \$175,000 to \$200,000 in option fees would be obtained the first year, no revenues the second year with revenues in a currently unknown amount starting the third or fourth year.

EXPENDITURE IMPACT:

Was expenditure anticipated in current years budget? No

Assumptions used in estimating expenditure include:

Expenditures will vary with responses to RFP. They will (probably) consist entirely of salaries and benefits involving current staff. They will involve analyzing RFP responses, negotiating contracts and related followup.