September 20, 1995
vactorac/jl

Introduced By: Miller

Proposed No.: 95-538

MOTION NO. 9687

A MOTION adopting the King County Vactor Waste Disposal Plan and requesting the King County Executive to implement the plan.

WHEREAS, King County has the responsibility to provide regional leadership and facilitate cooperation with local municipalities, and

WHEREAS, King County has the responsibility to protect and manage water quality and aquatic resources, and

WHEREAS, the residual waste generated by routine storm drainage maintenance commonly referred to as vactor waste, frequently contains contaminants such as heavy metals, petroleum hydrocarbons and other pollutants, and

WHEREAS, current disposal practices for this waste stream threaten surface and groundwater quality in King County, and

WHEREAS, a regional system for vactor waste disposal is needed to provide cost-effective alternatives to inappropriate disposal, and

WHEREAS, King County, in cooperation with representatives from local municipalities, private companies, sewer districts, and regulatory agencies, has completed the King County Vactor Waste Disposal Plan, which, when implemented, will substantially reduce the environmental impacts due to inappropriate disposal of vactor waste,

increase compliance with state and local regulations, and reduce costs for both the public and private sector, and

WHEREAS, King County recognizes the contributions of the King County Regional Vactor Waste Disposal Planning Committee in developing the King County Vactor Waste Disposal Plan, and

WHEREAS, the plan is herewith transmitted to the King County council;

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

The King County Vactor Waste Disposal Plan is hereby adopted as a functional plan pursuant to the King County Comprehensive Plan. The King County executive is hereby directed to assist in the implementation of the King County Vactor Waste Disposal Plan, consistent with the Short-Term Action Plan shown as Attachment B, and to pursue and propose any minimal legislative changes necessary, to budget necessary resources for staffing associated implementation programs, and to work cooperatively with the cities of King County for implementation of the plan.

PASSED by a vote of 12 to 0 this 16th day of October, 1995.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Kent Pullen
Chair

ATTEST:

Gerald A. Peterson
Clerk of the Council

Attachments:

A. King County Vactor Waste Disposal Plan
B. Short-Term Action Plan

SHORT-TERM ACTION PLAN

for the

9687

KING COUNTY VACTOR WASTE DISPOSAL PLAN

The King County Plan for Vactor Waste Disposal contains a number of goals and objectives which comprehensively address problems associated with this waste stream. There are several priority concerns. To reduce inappropriate and illegal discharge of liquid vactor waste (decant), new facilities for treatment of decant and subsequent discharge to the sanitary sewer (decant stations) need to be built. Private sector maintenance companies need access to both new and existing stations owned by public agencies. To reduce the significant costs of disposal of vactor solids, new options for treatment and disposal need to be explored. Finally, to improve vactor operators' knowledge of existing and future requirements pertaining storm drainage maintenance, provisions for operator training and on-going information sharing are imperative.

SWM staff, working cooperatively with other County agencies, municipalities, and private companies, have begun implementing the King County Vactor Waste Disposal Plan. The concerns identified as priorities are being addressed first. The Short-term Action Plan, described below, lists efforts that will be undertaken through early 1996.

King County Council review and adoption of the King County Plan for Vactor Waste Disposal

The first necessary action is adoption of the plan by the King County Council. The authorization and backing of the Council will provide the catalyst for successful implementation of the goals and recommendations of the Plan.

Product: An adopted plan for vactor waste disposal in unincorporated King County

Testing three treatment methodologies for remediation of vactor solids

Reducing the costs of environmentally-sound vactor waste disposal is an important issue. Existing disposal options, such as taking vactor solids to a landfill or using the material as feedstock in concrete or asphalt manufacture, are expensive. To address this need, SWM staff are initiating a project that will test different methodologies for remediating contaminated soil. The project goal is to reduce contaminant concentrations sufficiently that less expensive recycling options, such as using treated vactor waste in compost or topsoil, will become feasible. Three methodologies will be tested in the laboratory to determine how well typical vactor waste can be remediated. The most promising methodology will be tested under field conditions to assess not only contaminant remediation, but also operational constraints.

Product: Assessment of treatment methodologies
Estimated Cost: $155,000
Source of Funding: Centennial Clean Water Fund Grant (awarded)

Siting and construction of a decant station in Woodinville

SWM staff are investigating the possibility of siting a decant station in the City of Woodinville. City staff are willing to consider permitting decant stations within the City. The County is expected to retain ownership of the proposed station, which will be opened to County vactor crews, private maintenance company crews working in the area, and possibly other municipal crews. Currently the City of Woodinville is contracting with King County to maintain the City's drainage system.

One possible site has been identified. The site is owned by King County Solid Waste Division, which is currently interested in selling the property. Preliminary engineering designs and an itemized cost estimate are attached.

Product: Decant station for handling liquid wastes
Estimated Cost: $200,000-$250,000
Source of Funding: Federal and state grants (proposed), SWM Fund

Ongoing facilitation of siting and construction of new vactor waste stations

SWM staff are working with cities and other agencies to facilitate the siting and construction of decant stations and solids facilities throughout King County in order to meet the goals of the plan. Staff are currently working with King County Roads and Engineering and Solid Waste Divisions; the Port of Seattle; and the Cities of Bothell, Redmond, Renton, Sea Tac, Seattle, Tukwila and others. SWM Staff are encouraging the installation of private and public shared-use facilities in underserved areas of the county in order to reduce costs of construction and operation. The overall network of stations in the county, including existing stations that are opened to shared use, should be designed to minimize driving distances to a maximum of 15 minutes for liquids and 30 minutes for solids. Areas of the county that are currently underserved include central Seattle, northeast Lake Washington, eastern I-90 corridor and southeast King County.

Product:	A regional network of decant stations
Estimated Cost:	$200,000 - $250,000 per station
Source of Funding:	Federal and state grants (proposed), SWM Fund, municipal funding

Implementation of a certification program authorizing private sector maintenance companies to use publicy-owned decant stations

Private vendors face significant limitations in terms of disposal sites. Currently only one city (Bellevue) allows private vendors access to its decant stations; King County allows very limited access to one of its decant stations. In the absence of free or inexpensive disposal sites, private vendors must either turn to expensive waste management companies, dispose of vactor waste on private property, or engage in illicit dumping. The last two options carry a high potentional for environmental degradation.

SWM staff are developing a system for providing private maintenance companies access to publicly-owned decant stations. An umbrella authorization is being developed that would provide a mechanism for County and city agencies to open their stations to companies. SWM staff are working with these agencies to address specific needs and requirements.

Product:	Institution of certification program
Estimated Cost:	$18,000
Source of Funding:	Puget Sound Water Quality Authority Action Grant (awarded)

Establishing access by the private sector and other government agencies to King County decant station

King County Roads staff are developing a program for other parties to use Roads vactor waste facilities by the first quarter of next year, consistent with state and local regulatory requirements (see Attachment 3). Steps to be taken include identifying appropriate sites, obtaining permits, establishing fees, developing requirements for outside users to meet, and constructing necessary improvements for implementation. SWM staff are also working with the Solid Waste Division to facilitate a similar opening of an existing decant station at the First Northeast Transfer Station.

Product: Access by private sector and other governments to decant stations
Estimated Cost: $20,000 - $25,000??
Source of Funding: Roads, SWM, and Solid Waste funds, user fees

Development of an ongoing certification course for vactor truck operators

SWM staff are working with Green River Community College to design a certification course for vactor truck operators. Currently, almost all training is through informal apprenticeships to more experienced drivers. There is a significant need for public and private vactor truck operators to be trained in proper methods of vactor waste handling and disposal. Topics will include the pollutant potential of vactor waste, either to local drainage systems or to rivers, lakes and puget Sound; job safety issues; and identification of different contaminants. Certification is likely to be required for operators applying for an authorization to use publicly-owned decant stations.

Product: One- to two-day certification course
Estimated Cost: $23,000
Source of Funding: Puget Sound Water Quality Authority Action Grant (awarded)

Institution of a BBS clearinghouse for vactor waste and storm water issues

To facilitate communication in vactor waste and storm water issues, SWM staff are seeking grant funding for an electronic bulletin board service (BBS). If funding is awarded, agency and company staff will be trained in accessing and using the service. County staff will be responsible for maintaining and monitoring the BBS. The BBS will provide continual on-line access to information for all users, as well as provide a forum for users to communicate and resolve problems.

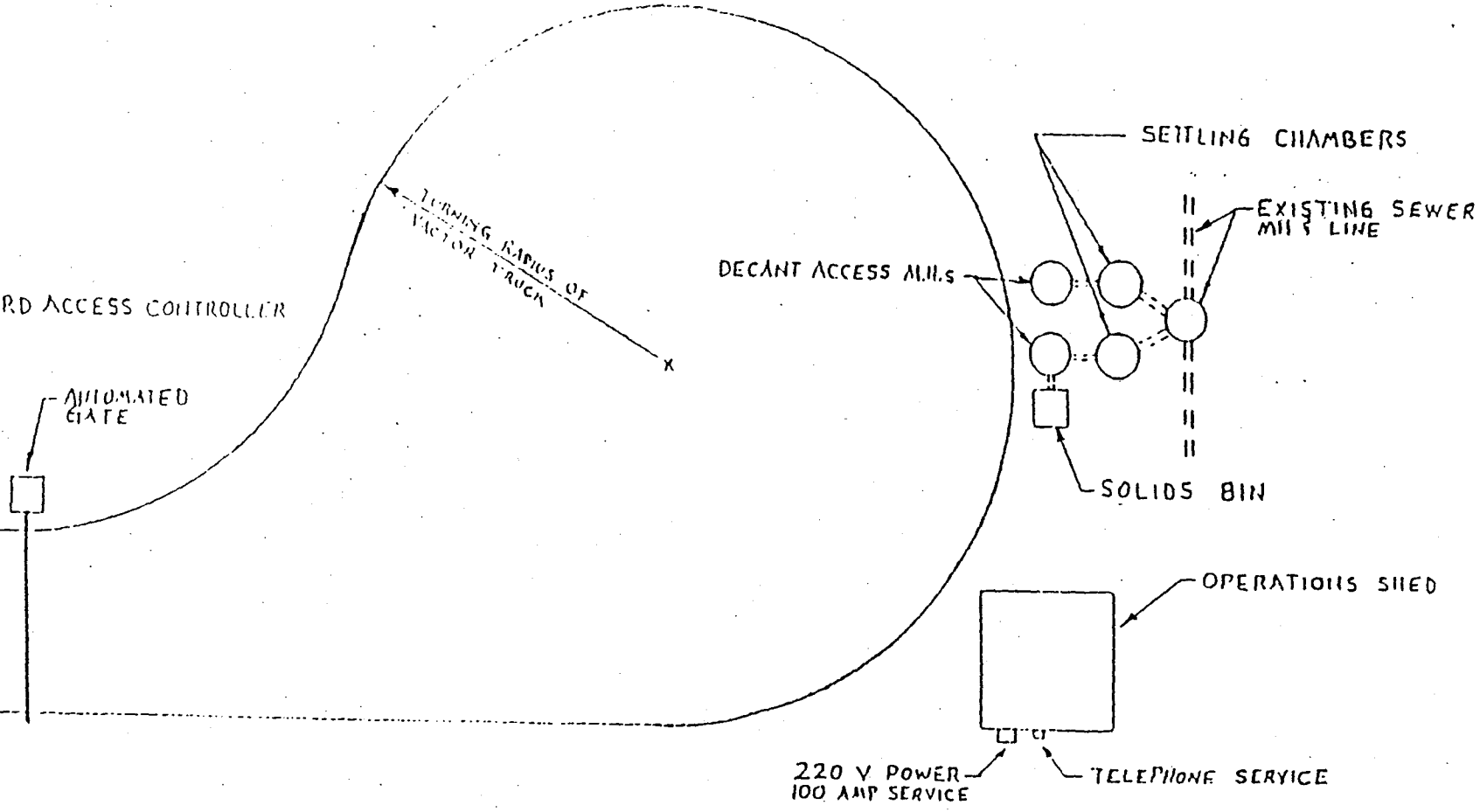
Product:	Enhanced dialogue and communication between Vactor operators and interested parties and storm water database available to all.
Estimated Cost:	$70,000
Source of Funding:	Puget Sound Water Quality Authority PIE Grant Fund (applied) USEPA Educational Grand Fund (applied)

Attachment 1

Decant Station Preliminary Engineering Designs

DECANT DISPOSAL STATION
SCHEMATIC DESIGN

SITE PLAN



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Attachment 2

Itemized Cost Estimates for a Decant Station

Itemized Cost Estimates for a Decant Station

Land Acquisition	$ 80,000 - $130,000
Surveying	$ 5,000
Design	$ 25.000
Permitting	$ 5,000
Construction	$ 80,000

Assumptions

1. Pipe runs will be short (approximately 100 linear feet total)
2. Settling basins will be Type II catch basins
3. Land is relatively level, and earthwork will be minimal
4. A roof is not needed.

Objective: DEVELOP PROGRAM FOR PUBLI

Responsibility: Roads Maintenance

ACTIONS	RESPONSI
Identify Responsible Agency (Roads, Solid Waste, SWM)	
· Write Issue Papers:	Brown, Ca
(Decant Stations, Solids Drying Facilities, Treatment Plant)	
Brief Director	Krail, Mat
Final Determination	Tanak
Risk Management/Prosecutor Review of Proposal	Bay
Identify Sites	
· Evaluate Capacity	Cassidy,
· Assess Impacts by Site	Cassidy,
(Operational, enviornmental, community)	Cassidy,
· Identify Cost Impact of Site Improvements	
· Report Containing Alternatives/Recommendations	Brown, Ca
(Liquids, Solids, Portable)	
· Final Decision	
Obtain Necessary Permits	
· Discharge Authorizations	Cassidy,
· Health Department	Cassidy,
· Permits Associated with Site Improvements	Cassidy,
· Existing Facilities	
· New Facilities	
Develop Process For Charging Fees	
Evaluate Options For Scales	Cassidy,
· Develop Agreements Between SW and Roads	Cassi
(Co located Sites: Bog, Renton)	
· Conduct Rate Analysis	Ahlers, B
· Estimate Costs:	
· Construction (including permits, inspection)	
· Maintenance: Facilities, Stockpiles, Trucking, etc.	
· Monitoring/Testing	
· Project Volumes	

King County

Objective: DEVELOP PROGRAM FOR PUBLIC

Responsibility Roads Maintenance

ACTIONS	RESPONSIBI
· Write Report	
· Management Review	
Executive/OFM Review	
· Draft Ordinance	
Council Review	
Develop Computer System (Tracking/Billing)	Ahlers, Sobi
· Write Billing/Receiving Procedures	Ahlers, Sto
Develop Certification Process/Requirements	SWM, Cass
Submit Budget Proposal (95, 96)	Brown, Ahl
· Identify Cost Increases (construction, monitoring, billing)	
· Write Proposal	
· Management Review	
· Executive/OFM Review	
· Council Review	
Prepare Sites	
· Bid Scales (and other necessary equipment)	Cassidy, Ko
· Install Scales/Computer System	Cassidy, Ah
· Construct Capital Best Management Practices as Required	Cassidy
Evaluate Portable Treatment Plant	
· Acquire Plant	Cassidy
· Hire Staff	
· Evaluate Program (Effectiveness, Cost)	
· Conduct Rate Analysis	
· Develop/implement process for public use if feasible	
Develop Training Program For Users	Cassidy, Bro