July 7, 1997 clerk 7/7/97

Introduced By:

Larry Phillips

Proposed No.:

97-433

MOTION NO.

10270

A MOTION authorizing immediate contracting with one or more contractors to assess health and safety requirements, assess fire and explosion potential, implement odor and other technical and operational improvements at the West Point solids drying plant, and waiving the requirements for competitive bidding or formal solicitation and Minority and Women's Business Enterprises requirements for these contracts.

WHEREAS, the council passed Ordinance 12548 on December 9, 1996 declaring an emergency requiring immediate action to continue the testing of solids processing alternatives at West Point between January 1, 1997 and March 31, 1997, and

WHEREAS, by Ordinance 12548 the council directed the executive to provide a detailed review and recommendation on solids processing options by March 31, 1997, and

WHEREAS, by Motion 10055 the council allowed the waiver of MWBE goals and competitive procurement requirements in contracting with consultants to meet the schedule established, and

WHEREAS, to fulfill the requirements and comply with the schedule established by Ordinance 12548 the county entered into contracts which provided independent testing, analysis, assistance with public involvement, and preparation of a final report to the council in accordance with the council's direction, and

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WHEREAS, due to snow storms and heavy rains which reduced available solids volumes, the testing and processing agreement was extended to April 28, 1997, and

WHEREAS, the executive submitted a final report to the council on May 7, 1997, recommending actions to continue meeting King County's obligations under the 1991 Settlement Agreement and committing the county to steps including, but not limited to, the following:

- 1. The implementation of technological and operational changes to enhance the efficiency of the existing digesters and improve the dewatering processes.
- 2. A comprehensive odor audit at the county plant at West Point. This audit will identify improvements that can be made to reduce odors at the site. Once identified, the County will implement the necessary changes.
- 3. Minimizing the impacts of biosolids hauling by replacing biosolids hauling trucks with new trucks to improve appearance, reduce noise, and reduce odor.
- 4. The implementation of any immediate technological changes made at West Point without increasing the 1998 sewer rate, and

WHEREAS, effective May 22, 1997, the county assumed ownership and the right to operate the drying facility and equipment at West Point formerly owned by PCL/SMI, and

WHEREAS, contracts to assess immediate health and safety, fire and explosion issues, implement odor improvements, and to train county workers to operate the facility are necessary, and

WHEREAS, certain technological and operational changes, including the solicitation of competitive bids or proposals for disposal trucks must be completed within

1997 to carry out the intent of the council and implement the executive's recommendations, and

WHEREAS, the scope of work, schedule and budget for these changes are outlined in the attached "1997-1998 WPTP Settlement Agreement Workplan", and

WHEREAS, the county has processes established to contract with independent consultants and contractors who have gained valuable experience and knowledge in producing the report, facilitating the public involvement process and in understanding the technological requirements of the facility, and

WHEREAS, the non-emergency requirements of KCC 4.16 relating to the county's lease or purchase of tangible personal property or services, contracts for public works as defined by RCW 39.04.010 or to the selection and award of professional and/or technical service consultant contracts including contracting on a competitive basis for public works contracts, leases or purchase of supplies, materials and equipment for West Point solids processing pursuant to chapter 36.32 RCW and compliance with Minority and Women's Business Enterprises requirements pursuant to KCC 4.18, 12.16 and 12.18 must be waived to prevent delay in completing such work, and

WHEREAS, all anticipated contracts for health and safety assessments, fire and explosion assessments, odor improvement recommendations, and identified technological and operational changes can be conducted within the appropriated budget;

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

A. The non-emergency requirements of KCC 4.16 relating to the county's lease or purchase of tangible personal property or services, contracts for public works as defined by RCW 39.04.010 or to the selection and award of professional and/or technical service consultant contracts including contracting on a competitive basis for public works contracts, leases or purchase of supplies, materials and equipment pursuant to chapter 36 RCW in order to prevent delay in beginning such work, are hereby waived.

B. The non-emergency Minority and Women's' Business Enterprises requirements pursuant to KCC 4.18, 12.16 and 12.18 are hereby waived as to the individual project contracts.

C. The emergency waiver of the requirements of KCC 4.18, 12.16 and 12.18 pursuant to this motion shall not amend the annual MWBE utilization goals unless the emergency makes it impossible to achieve the annual utilization goals.

D. The term of existing contracts may be extended and the scope expanded to complete the technological and operational change requirements at West Point as included in the attached 1997-1998 WPTP Settlement Agreement Workplan.

PASSED by a vote of 11 to 0 this 18 day of a d

KING COUNTY COUNCIL KING COUNTY, WASHINGTON

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ATTEST:

Clerk of the Council

Attachments:

- A. Ordinance 12548
- B. Motion 10055
- C. 1997-1998 WPTP Settlement Agreement Workplan

12/03/96

Introduced By:

Larry Phillips
Rob McKenna
Greg Nickels
Brian Derdowski
Pete von Reichbauer
Cheis Wagen

Chris Vance Kent Pullen Jane Hague

pcl-ord.doc 12/10/96 clerk

Proposed No.:

96-1000

ORDINANCE NO

AN ORDINANCE relating to sewage treatment, directing review of West Point treatment plant sludge processing technology options, requesting the executive to negotiate an interim agreement with the contractor, calling for a public comment process, and declaring an emergency.

SECTION 1. Findings of Fact.

A. The expansion of the West Point Sewage Treatment Plant ("West Point") led to major community concerns resulting in administrative appeals and litigation regarding the decision to site a secondary sewage treatment facility at West Point. A Settlement Agreement dated February 19, 1991, was entered into by and among Metro (now King County), Friends of Discovery Park, Puget Sound Water Quality Defense Fund, Legal Advocates for Washington, Washington Environmental Council, and the Magnolia Community Club (the "1991 Settlement Agreement"). Condition 1 of the 1991 Settlement Agreement related to biosolids processing at West Point and specifically identified the PCL/SMI process as the alternative biosolids handling technology to be implemented. The 1991 Settlement Agreement states that if Metro determines that the process is unsuccessful, it may implement an alternative biosolids handling process.

B. Condition Ic of the City of Seattle Project Level Conditions Permit C.F. No. 296799 outlines a specific process for decisions related to plant footprint and future development. This section states in part that the "secondary treatment plant at West Point shall include a biosolids processing facility that, if successful, will result in the eventual removal of the existing digesters . . . ." The final determinations regarding the success of the biosolids processing and any decision to remove or retain the digesters are to be by legislative action.

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C. Consistent with the project conditions established for West Point expansion by the City of Seattle, certain secondary treatment plant biosolids processing options have been undertaken by the county. One processing contractor, Reidel/SMI, was selected on a competitive basis and has provided raw biosolids processing under a contract between Reidel/SMI (now PCL/SMI) and Metro (now King County) dated September 8, 1989 (the "PCL/SMI Contract"). The council and its Regional Water Quality Committee were previously informed by executive staff in September 1994 that the process for reviewing the PCL/SMI Contract would be undertaken in early 1997.

D. It is in the interests of the county to achieve the most environmentally effective and economic processing of sewage biosolids. The county's environmental goals for West Point include but are not limited to minimizing biosolids disposal truck traffic from the plant through the Magnolia community; minimizing West Point treatment plant odors; reducing risk of water pollution; minimizing noise; protecting eagle habitat; providing recreational opportunities; ensuring hillside stability; beneficially reusing biosolids; reusing or selling methane gas or co-generating electricity; and, to the extent possible, providing shoreline improvements such as reducing the digesters' footprint.

E. The PCL/SMI operation has processed raw biosolids and has proven effective in reducing biosolids disposal truck traffic from West Point and producing a pathogen-free (Class A) biosolids.

- F. One policy of the county is to investigate the cost-effective production and market for Class A biosolids. At West Point, the county will produce an end-product mix by continuing both the existing digestion and dewatering of biosolids and seeking, through a full and open competitive process, private-vendor processing of a portion of the biosolids.
- G. In accordance with the Project-Level Conditions established by the City of Seattle, the county will continue to search for a solution that will handle biosolids generated at West Point and result in digester removal. The county will, in accordance with the 1991 Settlement Agreement, continue to pursue an alternative biosolids handling process or processes at West Point, provided such alternative processing system (i) reduces

 the digesters' footprint on site; (ii) does not require structures higher than those currently planned for the area; and (iii) serves the goal of minimizing biosolids disposal truck traffic.

H. Due to the location of PCL/SMI's facilities and history of operation at West Point, special facilities or market conditions exist which support a short-term pilot project to evaluate options for processing dewatered, digested, partially digested, or a mixture of undigested activated biosolids and digested biosolids. The council hereby finds as a fact and declares that an emergency exists requiring immediate action to continue the testing of biosolids processing alternatives at West Point for up to 90 days pending the detailed review and recommendation by March 31, 1997 as specified in Section 2 of this ordinance. The council also finds as a fact that the services provided by PCL/SMI involve special facilities or market conditions providing a basis for a waiver from competitive procurement pursuant to Ordinance 12138, Section 9, K.C.C. ch. 4.16. Nothing in this ordinance shall be construed to rescind or extend the notice of termination for convenience given by the executive on November 13, 1996.

SECTION 2. Review of West Point Treatment Biosolids Processing. The executive shall report to the council by March 31, 1997 regarding his recommendation for biosolids processing options, and the criteria to be included in a competitive process, including but not necessarily limited to the following issues:

- A. Removing some or all digesters and financial policies to support the establishment of a reserve account needed to affect such removal;
  - B. Retaining the PCL/SMI drying facility;
- C. Providing an economic and operational analysis that compares the costs, risks and benefits of alternative technologies and potential alternative suppliers including the results of the RFI issued under Section 4 of this ordinance;
- D. Identifying community impacts of alternatives and reasonable mitigation of such impacts;
- E. Analyzing the effect of alternatives on the 1991 Settlement Agreement and the Project-Level Conditions established by the City of Seattle; and
- F. Analyzing how alternatives would achieve the policy goals described in Section
   2(D) of this ordinance.



SECTION 3. Executive Report Due March 31, 1997. The executive shall provide opportunities for public review and input from the council, the public and persons interested in the 1991 Settlement Agreement. In the report due March 31, 1997, the executive shall include information from the public process and also provide an economic analysis comparing West Point operating costs under (i) the terminated PCL/SMI contract, (ii) with any negotiated amended contract allowing processing of a mixture of undigested, digested, dewatered or partially digested biosolids, or a mixture of undigested activated biosolids and digested biosolids, (iii) with potential alternative suppliers and (iv) using Best Management Practices without the PCL/SMI operation. The findings shall be expressed as a rate differential.

SECTION 4. Consideration of County Labor Policies. Before the county enters into any new contract to test or process digested biosolids, the County will hold discussions with affected labor unions to ensure consistency with adopted county labor policies and existing labor agreements to assure that no current county employee will be demoted or be subject to lay-offs as a result of such new agreement or contract to process digested, dewatered, partially digested, or a mixture of undigested activated biosolids and digested biosolids.

SECTION 5. 90-Day Contract. On or before December 31, 1996, the county shall enter into a new, 90-day contract with PCL/SMI under which PCL/SMI shall test and process up to 60 tons per day of digested, dewatered or partially digested biosolids, or a mixture of undigested activated biosolids and digested biosolids; provided, however, that the county shall not enter into such a short-term contract until after the effective date of a satisfactory agreement between the county and PCL/SMI regarding Capacity Credits and all other applicable issues arising from the county's termination for convenience under Section 2.3(a) of the PCL/SMI Contract. The 90-day contract shall, among other provisions, provide for the test results, analysis, and supporting data to be made available to the county and to the public. The executive is requested to review any proposed 90-day contract with the council prior to its execution.

SECTION 6. Competitive Process. The executive is requested to immediately form a task force of the executive and the council to develop and commence, a full and open

competitive process to secure environmentally sound, cost-effective and reliable management of West Point's biosolids in a manner consistent with the City of Seattle Conditional Use Permit, the 1991 Settlement Agreement, and county environmental goals. Such competitive process shall not preclude opportunities for competition or further involvement by county employees. Such competitive process shall provide fair opportunity for interested vendors to respond to a competitive request for information (RFI) or a competitive request for proposals (RFP).

SECTION 7. Additional Funds for Research and Alternative Technology Testing.

Up to five million dollars of any savings derived from the November 13, 1996, termination of the PCL/SMI Contract shall go to the Applied Wastewater Technology Program for expenditure on research into and acquisition of alternative technologies.

SECTION 8. Public Comment Process. The executive shall provide an opportunity for review and comment by interested citizens and organizations regarding sewage treatment processing alternatives including but not limited to the PCL/SMI process.

SECTION 9. Declaring an Emergency. The council finds as a fact and declares that an emergency exists and that this ordinance is necessary for the immediate preservation of public peace, health, or safety or for the support of county government and existing public institutions.

SECTION 10. Severability. If any provision of this ordinance or its application to 2 any person or circumstance is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances is not affected. Š INTRODUCED AND READ for the first time this and day of 4 December 19 96 5 PASSED by a vote of 12 to 0 this 9th day of December 6 1996. 7 KING COUNTY COUNCIL 8 KING COUNTY, WASHINGTON 10 11 ATTEST: 12 13 APPROVED this 20 day of December, 1976 14 15 16 17 18 Attachments: None 20 21 22 23 pcl-ord 10doc

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Project:

Dryer Assessment, Training and Startup

#### Project Description and Scope:

10270

The objective of this project is to provide for the safe and successful startup of the solids drying facility at the West Point Treatment Plant. This project consists of four subprojects:

- 1. Inventory, cleanup and maintenance of solids drying equipment and facility.
- 2. Implementation of comprehensive drying facility operations and maintenance training program.
- 3. Assess drying facility safety and operational issues and make necessary modifications.
- 4. Startup and testing of drying facility.

#### Project Status and Schedule:

Staff is initiating work to inventory the equipment and assess specific maintenance needs of facility during the period before County employees begin to operate the facility.

Staff is discussing training options with PCL/SMI to determine if previous plant operations and maintenance staff could be hired on a contract basis to provide some or all of the training. Contacts have been made with other public agencies to begin assessment of alternative drying facility training programs.

Initial facility walk-through has been conducted by consultant to evaluate drying facility in terms of any immediate health and safety issues. Staff is finalizing scope for more extensive facility evaluation by industrial safety inspectors and a fire and explosion hazards expert.

Please see attached bar chart for schedule details.

#### Project Budget:

Initial budget estimate is \$1.5 million. This estimate will be reviewed upon development of the training plan and consultant recommendations/predesign reports.

Project:

Procure and Install New "High-Solids" Centrifuge

## Project Description and Scope:

10270

A new "high solids" centrifuge will be purchased and installed to remove more water from the biosolids thereby reducing the number of biosolids hauling truck trips leaving the West Point site. This unit will serve as a main processing unit if the five truck trip per day limit can be met without drying. If drying is necessary to meet the limit, this unit will serve as the primary backup to the drying facility so that truck trips can be minimized when the drying facility is out of service.

#### Project Schedule:

If procurement can be completed on a sole source basis, delivery and installation of the unit should be completed by early 1998. See attached bar chart for schedule detail.

## Project Budget:

Initial budget estimate is \$1,000,000. This estimate will be reviewed upon completion of the procurement process.

Project:

Truck Trip Reduction

Project Description and Scope:

10270

The objective of this project is to use one of the "high-solids" centrifuges currently located in the solids drying facility to quickly achieve a reduction in truck trips by removing more water from the biosolids. In this manner, the reduction in truck trips can begin in three to four months—about six months sooner than if we wait until the new centrifuge is manufactured and delivered. It is currently intended that one of the existing high-solids centrifuge units will be relocated from the drying facility to the solids dewatering building where it will replace one of the two "low-solids" centrifuges currently scheduled for replacement (there are four low-solids centrifuges currently in the dewatering building — two relatively new units and two old units in need of replacement). Operation of the relocated centrifuge will be assessed to determine if this type of unit will produce sufficiently dry biosolids to meet the five truck trip per day limit.

Consultant assistance will be obtained for relocating the centrifuge and assessing the capability of the system to reduce truck trips.

#### Project Schedule:

It is anticipated that relocation of one centrifuge will take about three months. Startup and an initial assessment of operation can be completed in 30 to 60 days.

#### Project Budget:

Initial budget estimate is \$230,000. This estimate will be reviewed after predesign.

Project:

AWT Digester Enhancement Program

Project Description and Scope:

10270

The purpose of this project is to enhance digester operating efficiency to support Settlement Agreement objectives pertaining to reduction in the number of digesters and truck trip reduction. The Applied Wastewater Technologies Program (technology development program established as part of the Settlement Agreement) will be funding two digester enhancement demonstrations.

- 1. Recuperative Thickening Demonstration This will be a full-scale demonstration (using one of the six digesters at the West Point Treatment Plant) of recuperative thickening. It will use the existing recuperative thickening centrifuges to remove a portion of the water from the digesters on a continuous basis rather than just to meet peak loading requirements as originally designed. It is believed that the digestion process can be made more efficient as a result of the removal of excess water and resultant higher concentration of microorganisms. The process will be evaluated to determine if digester volume needs can be reduced, solids production (and therefore truck trips) can be reduced and methane production can be increased.
- 2. Thermophilic Digestion Demonstration This will likely use the existing AWT digester research trailer to demonstrate high temperature digestion of West Point solids. The temperature in the digesters will be elevated to approximately 130F. Microorganisms that function at that temperature can "digest" solids more quickly thereby reducing the amount of digester volume needed. There is also a potential that the process would produce a "Class A" biosolids product. The technology will be assessed to determine if digester volume needs can be reduced, truck trips can be reduced and a Class A product can be produced without adverse impacts.

#### Project Schedule:

The recuperative thickening demonstration is scheduled to be implemented this summer. The thermophilic digestion demonstration is scheduled to be initiated in late summer or fall. Both demonstrations will require at least six months of operation to produce reliable results.

#### Project Budget:

Initial budget estimate for these projects is \$650,000. This estimate will be reviewed upon completion of the predesign reports.

Project:

Odor Reduction

10270

### Project Description and Scope:

An independent odor consultant will conduct an odor "audit" of the West Point plant and make recommendations regarding needed improvements. The consultant will identify odor sources at the plant and recommend system, equipment or procedural changes to eliminate the odor source. Initial efforts will focus on previously identified odor sources such as the digester covers and pump engine exhaust. Work on modifications will begin as soon as corrective measures are identified. It is intended that necessary modifications will be completed this summer if at all possible.

#### Project Schedule:

Consultant work will start in early June. See attached bar chart for details.

#### Project Budget:

Initial budget estimate is \$300,000 including about \$20,000 for the consultant. A more detailed estimate will be provided by the consultant based on recommended modifications.

Project:

Biosolids Haul Truck Improvements

### Project Description and Scope:

10270

New trucks will be purchased to alleviate the community's concerns regarding the appearance of the existing trucks and to potentially increase the capacity of each truck. The new trucks will have state of the art noise and odor reduction features as well as improved appearance. Several promising new technologies have been identified and will be further investigated. Staff will work with the community for input into the selection process to insure that the selected trucks are considered more aesthetically acceptable.

#### Project Schedule:

It is anticipated that tractor/trailer specifications can be completed by the end of August. Delivery time is unknown at this time.

#### Project Budget:

The initial budget estimate is \$1.5 million. Estimate will be reviewed after predesign.