



Legislation Text

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AN ORDINANCE adopting policies relating to odor control at wastewater treatment plants and conveyance facilities; and amending Ordinance 13680, Section 5, and K.C.C. 28.86.050.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Findings.

A. The metropolitan King County council adopted the Regional Wastewater Services Plan (RWSP) by Ordinance 13680 on November 29, 1999. The RWSP set forth policies intended to guide the county in providing wastewater treatment at its existing plants and in expanding treatment capacity through the year 2030. In treatment plant policy 4 (TPP-4), the RWSP calls for King County to establish goals for odor control at all treatment plants and calls for the executive to investigate potential technologies and costs for odor control and recommend a policy so that odors are controlled at existing plants and any new plant.

B. In accordance with TPP-4 King County has investigated odor control and prevention and measurement technologies and costs. An evaluation was performed on the West Point Plant and South Plant and their associated odor control systems, maintenance practices and operating data. A series of six odor control workshops were held in March and April 2002 regarding state of the art odor prevention and control. Engineering, public outreach, and operations and management staff from the county's wastewater treatment division participated in these workshops along with outside engineering experts. As a result of these efforts, King County defined the odor control prevention levels currently achieved by the county's existing treatment plants and those that are achievable.

D. The executive's recommended odor control policies as called for in TPP-4 of Ordinance 13680 are included in this ordinance.

SECTION 2. Ordinance 13680, Section 5, and K.C.C. 28.86.050 are hereby amended to read as follows:

Treatment plant policies (TPP).

A. Explanatory material. The treatment plant policies are intended to guide the county in providing treatment at its existing plants and in expanding treatment capacity through the year 2030. The policies direct that secondary treatment will be provided to all base sanitary flows. The county will investigate possible tertiary treatment with a freshwater outfall to facilitate water reuse. The policies also direct how the county will provide the expanded treatment capacity necessary to handle the projected increases in wastewater flows resulting from population and employment growth. The policies provide for the construction of a new treatment plant (the north treatment plant) to handle flows in a new north service area, expansion of the south treatment plant to handle additional south and east King County flows, and the reservation of capacity at the west treatment plant to handle Seattle flows and CSOs. The potential for expansion at the west and south treatment plants will be retained for unanticipated circumstances such as changes in regulations. The policies address goals for odor control at treatment plants and direct that water reuse is to continue and potentially expand at treatment plants. The policies also describe a cooperative siting process for the new north treatment plant and its outfall.

B. Policies.

TPP-1: King County shall provide secondary treatment to all base sanitary flow delivered to its treatment plants. Treatment beyond the secondary level may be provided to meet water quality standards and achieve other goals such as furthering the water reuse program or benefiting species listed under the ESA.

TPP-2: King County shall provide additional wastewater treatment capacity to serve growing wastewater needs by constructing a new north treatment plant in north King county or south Snohomish county and then

expanding the treatment capacity at the south treatment plant. The west treatment plant shall be maintained at its rated capacity of one hundred thirty-three mgd. The south treatment plant capacity shall be limited to that needed to serve the eastside and south King County, except for flows from the North Creek Diversion project and the planned six-million-gallon storage tank. The potential for expansion at the west treatment plant and south treatment plant should be retained for unexpected circumstances which shall include, but not be limited to, higher than anticipated population growth, new facilities to implement the CSO reduction program or new regulatory requirements.

TPP-3: Any changes in facilities of the west treatment plant shall comply with the terms of the West Point settlement agreement.

TPP-4: ~~((King County shall establish goals for odor control at all treatment plants. In order to establish these goals, the executive shall investigate potential technologies and costs for odor control and recommend a policy to the council for inclusion in the RWSP. This investigation shall be completed and a policy adopted in a timely manner so that odors are controlled at existing plants and at any new plant. Odor control facilities and equipment shall be designed, and operated to meet these goals. In the case of the south treatment plant, King County's goal shall be to significantly reduce odor below baseline levels established in the development of the 1993 south treatment plant air model.))~~ King County's goal is to prevent and control nuisance odor occurrences at all treatment plants and associated conveyance facilities and will carry out an odor prevention program that goes beyond traditional odor control. To achieve these goals, the following policies shall be implemented:

1. Existing treatment facilities shall be retrofit in a phased manner up to the High/Existing Plant Retrofit odor prevention level as defined in Table 1 of Attachment A to this ordinance, the odor prevention policy recommendations dated March 18, 2003. This level reflects what is currently defined as the best in the country for retrofit treatment facilities of a similar size. Odor prevention systems will be employed as required to meet the goal of preventing and controlling nuisance odor occurrences;

2. Existing conveyance facilities that pose nuisance odor problems shall be retrofitted with odor

prevention systems as soon as such odors occur, subject to technical and financial feasibility. All other existing conveyance facilities shall be retrofitted with odor control systems during the next facility upgrade;

3. The executive shall phase odor prevention systems implementing the tasks that generate the greatest improvements first, balancing benefit gained with cost, and report to the council on the status of the odor prevention program annually. This report shall include a listing and summary of odor complaints received and detail progress on implementing odor prevention policies and projects;

4. New regional treatment facilities shall be constructed with odor control systems that are designed to meet the High/New Plant odor prevention level as defined in Table 1 of Attachment A to this ordinance, the odor prevention policy recommendations dated March 18, 2003. This level reflects what is currently defined as the best in the country for new treatment facilities of a similar size;

5. New conveyance facilities serving these new regional treatment facilities shall also be constructed with odor control systems as an integral part of their design;

6. Design standards will be developed and maintained for odor control systems to meet the county's odor prevention and control goals;

7. A comprehensive odor control and prevention monitoring program for the county's wastewater treatment and conveyance facilities will be developed. This program shall include the use of near facility neighbor surveys and tracking of odor complaints and responses to complaints and shall consider development of an odor prevention benchmarking and audit program with peer utilities; and

8. New odor prevention and measurement technologies will be assessed and methods for pilot testing new technologies identified when determined by the executive to be necessary and appropriate for achieving the goals of this policy.

TPP-5: King County shall undertake studies to determine whether it is economically and environmentally feasible to discharge reclaimed water to systems such as the Lake Washington and Lake

Sammamish watersheds including the Ballard Locks.

TPP-6: When there are opportunities to transfer flows between King County's treatment facilities and treatment facilities owned and operated by other wastewater utilities in the region, the county shall evaluate them. Such evaluation shall include, but not be limited to cost, environmental and community impacts, liability, engineering feasibility, flexibility, impacts to contractual and regulatory obligations and consistency with the level of service provided at the county owned and operated facilities.

TPP-7: King County may explore the possibility of constructing one or more satellite treatment plants in order to produce reclaimed water. The county may build these plants in cooperation with a local community and provide the community with reclaimed water through a regional water supply agency. In order to ensure integrated water resource planning, in the interim period prior to the development of a regional water supply plan, King County shall consult and coordinate with regional water suppliers to ensure that water reuse decisions are consistent with regional water supply plans. To ensure costs and benefits are shared equally throughout the region, all reclaimed water used in the community shall be distributed through a regional water supply agency consistent with a regional water supply plan.

TPP-8: King County shall continue water reuse and explore opportunities for expanded use at existing plants, and shall explore water reuse opportunities at all new treatment facilities.

TPP-9: A comprehensive public involvement program shall be developed and implemented to provide the public, at a minimum, the opportunity to give input on the criteria and the screening process used for selecting the list of possible sites for the new north treatment plant, its conveyance system and outfall and to comment on the final selection of a site. The King County executive shall establish one or more committees to aid in the siting of a north treatment plant. The committees shall, at a minimum, evaluate siting criteria to be used and propose a narrowed list of sites for consideration by the executive after consulting with the council as follows:

1. The King County executive shall transmit a motion to the council that establishes the criteria by which sites

will be selected; and

2. The executive shall provide the council with timely reports that detail the sites that meet the criteria and are under consideration and, at a later date, those sites that are final candidates for the siting of the north treatment plant.

TPP-10: Based on criteria approved by the council, the King County executive shall have the final decision on the site for a north treatment plant.

SECTION 3. The executive is hereby directed to update the RWSP operational master plan that was adopted by Motion 10809 on December 6, 1999 to comply with this ordinance.