



1200 King County Courthouse 516 Third Avenue Seattle, WA 98104

Legislation Text

File #: 2017-0141, Version: 2

Clerk 05/08/2017

A MOTION providing for a half-century evaluation and report on the West Point Treatment Plant.

WHEREAS, the West Point Wastewater Treatment Plant, which is the flagship of the region's wastewater system, serves as the key wastewater treatment facility for a significant portion of the system's service area, and

WHEREAS, the plant experienced a major system failure in the early morning of February 9, 2017, with the result that the plant was inundated by major internal flooding and that the emergency bypass discharge was activated, resulting in the release of high volumes of untreated, combined flows of wastewater and stormwater directly into Puget Sound ("the event"), and

WHEREAS, the plant was constructed over fifty years ago, and began operations in 1966, and
WHEREAS, the operating context of the plant, including the dramatic population growth in the plant's
service area, the substantial regional increase in impermeable cover over the region's land surface, existing and
projected weather-related impacts of climate change, the county's adoption of a comprehensive plan that
concentrates growth and housing patterns, the development of heightened environmental standards and
regulatory requirements, the increase in the region's industrial base as a contributor to wastewater flows and
similar developments, present a more complex and challenging operating environment for the plant as
compared to the period of its initial construction, and

WHEREAS, plant managers have indicated that peak storm flows are regularly reaching and exceeding the four hundred forty million gallons per day capacity limit of the plant, and

WHEREAS, as with any aging, complex capital facility, it is appropriate to consider any contextual, functional, design and engineering constraints of the facility that have emerged over the period of its operations, to position it for continued service to the region, and

WHEREAS, the past half-century has provided an opportunity for operating crews and wastewater treatment division management to identify and characterize significant vulnerabilities of the plant that could contribute to future operational challenges, and

WHEREAS, the event highlights the need for a half-century review of the plant's operating context and system status, against current and projected needs and performance demands;

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

- A. The executive is requested to retain a third-party consultant to undertake a review and evaluation of the West Point Treatment Plant after a half century of operations, and prepare a report addressing:
- 1. Changes in operating context, such as increases in service population, increased impermeable cover over the land base of its service area, current and projected climate-driven changes in weather patterns and flow demand, changes in regulatory requirements and increased concern about water quality, concentrated growth patterns associated with the county's Comprehensive Plan, increased industrial contribution to wastewater flows and how well positioned the plant is to meet these changes in operational context;
- 2. Current and projected processing capacity demand compared to current capacity; changes in the state-of-the-art regarding wastewater processing technology; constraints acting upon the plant including, functional, design and engineering constraints and land base limitations that constrain capital development;
- 3. The increasing levels of toxics from outdoor urban surfaces, including automotive chemicals, pesticides and herbicides, chemicals accumulated through air deposition and other toxics that are directed to the plant and which the plant is not designed to remove; and
- 4. System vulnerabilities and other plant operations and management concerns including training and maintenance practices that have emerged over the period of the plant's operations.

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- B. The report should identify and make recommendations regarding system improvements or upgrades to position the facility for the coming decades of operations.
- C. The evaluation and report should be transmitted by one hundred eighty days after the report required by Motion 14826 is delivered to the council, in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all councilmembers, the council chief of staff and the lead staff for the regional water quality committee, or its successor.