

Legislation Text

File #: 2017-0115, **Version:** 2

Clerk 03/14/2017

A MOTION providing for a report on causes, consequences and appropriate responses to the West Point Treatment Plant February 2017 emergency bypass discharge event.

WHEREAS, the West Point Wastewater Treatment Plant serves as the key wastewater treatment facility for a significant portion of the King County wastewater system, 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 causing the release of high volumes of untreated, combined flows of wastewater and stormwater directly into the Puget Sound through the plant's emergency bypass outfall and substantial damage to plant equipment and facilities ("the event"), and

WHEREAS, the secondary treatment process at the plant currently remains suspended, resulting in the continuation of minimally treated wastewater and stormwater discharging into the Puget Sound, and

WHEREAS, the wastewater treatment division has indicated that there have been previous occasions when effluent discharge pump functions were interrupted, requiring crews to quickly restore pumping functionality, and that after each such an occasion, the wastewater treatment division performed event evaluations as to the causes and response to the pump function interruption, and

WHEREAS, the council has responsibility for monitoring operations, reviewing and approving planning, defining policy, adopting operating and capital expenditures and reviewing and establishing rates and fees for the wastewater treatment system, and

WHEREAS, the public needs to know the causes of the event and how it can be avoided in the future,

and

WHEREAS, meeting the council's responsibility and the public's need, in the context of the event, requires a formal tool to provide a clear assessment as to causes, facility damage, full recovery timeline, appropriate preventive systems and lessons learned, and

WHEREAS, providing an independent expert review of these issues will result in an unbiased evaluation that will provide a substantial benefit to the wastewater treatment system including future operational and capital decisions;

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

A.1. The council chair is requested to direct the chief of staff to initiate an expedited process to procure a qualified contractor to prepare a report addressing and evaluating the causes of the event, as well as providing recommendations for how a similar event can be avoided in the future and what responses could have been taken to avert the event. Authorization to contract will be by future council motion. The wastewater treatment division shall work closely with and provide information as requested by the consultant to accomplish the purposes of the report.

2. The report should include, but not be limited to:

- a. a description of the flooding of the plant that occurred during the event, including flooding volume, sources, facility damage, threats to staff safety, and implications for facility operations and design;
- b. an evaluation of the causes or contributing factors to the event, including but not limited to the weather, volumes of the combined flows of wastewater and stormwater, failures and causes of such failures of equipment or systems, including but not limited to electrical, any wastewater treatment division operational protocol, procedure or practice, and any staff training, decisions and actions of the on-site crew during or leading up to the event;
- c. a description and evaluation of the wastewater treatment division's immediate and subsequent responses to the event, including communications after the event to stakeholders and the public and internal

reporting and tracking processes;

d. an evaluation of how the flooding of the plant could have been averted;

e. an evaluation of the plant's power systems, both leading to the plant, and within the plant, with any recommendations for opportunities to strengthen system redundancy and avoid power disruptions or abnormalities that may require emergency crew response;

f. a description of the environmental impacts from the discharge of untreated or minimally treated wastewater and stormwater, including impacts related to wastewater bacteria, as well as metals and other toxins, associated with the event;

g. a description of the public health impacts resulting from the event;

h. recommendations of appropriate preventive approaches, strategies, practices or systems to avoid recurrence of extended suspensions of full operation of the wastewater treatment at the plant, consistent with the plant's National Pollutant Discharge Elimination System ("NPDES") permit and state and federal laws;

i. an evaluation of methods to relieve flow volumes at the plant during future heavy storm periods, including, but not limited to, flow diversion, infiltration/inflow control, increased system storage or green stormwater infrastructure opportunities, or any other appropriate means;

j. a description and an evaluation of the wastewater treatment division's lessons learned from the event that will help avoid future extended suspension of full operation of the wastewater treatment at the plant, consistent with the plant's NPDES permit and state and federal laws;

k. a review of prior occasions at the plant involving effluent discharge pump shutdowns or operational interruptions over the past three years, describing the cause of each event, the outcome, whether any facility damages resulted, whether pump replacement or repair was required and whether corrective action was taken to avoid future such events; and

l. any other findings or analysis the consultant deems relevant or necessary for the council and the public to understand the causes and effectiveness of the response to the event and how to prevent a similar

event in the future.

3. The consultant should deliver its final report simultaneously to the council and the executive by July 1, 2017, or at other date mutually agreeable between the council chief of staff and the contractor. The consultant shall deliver the report to the council in the form of a paper original and an electronic copy to 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 transportation, economy and environment committee and regional water quality committee, or its successor. The council may require interim reports on a periodic basis.

4. The wastewater treatment division shall work closely with the consultant by providing any and all assistance and access to information as requested by the consultant in furtherance of its review. The wastewater treatment division also shall participate in an exit meeting with the consultant to address the findings and recommendations of the report. The council by subsequent council action shall provide for reporting on the implementation of recommendations of the consultant.