



KING COUNTY
Signature Report

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

23

March 13, 2017

Motion

Proposed No. 2017-0115.1

**Sponsors Kohl-Welles, Lambert and
Dembowski**

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

4 WHEREAS, the West Point Wastewater Treatment Plant serves as the key
5 wastewater treatment facility for a significant portion of the King County wastewater
6 system, and

7 WHEREAS, the plant experienced a major system failure in the early morning of
8 February 9, 2017, with the result that the plant was inundated by major internal flooding
9 causing the release of high volumes of untreated, combined flows of wastewater and
10 stormwater directly into the Puget Sound through the plant's emergency bypass outfall
11 and substantial damage to plant equipment and facilities ("the event"); and

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

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

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

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

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

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

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

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

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

- 41 a. a description of the flooding of the plant that occurred during the event,
42 including flooding volume, sources, facility damage, threats to staff safety, and
43 implications for facility operations and design;
- 44 b. an evaluation of the causes or contributing factors to the event, including
45 but not limited to the weather, volumes of the combined flows of wastewater and
46 stormwater, failures and causes of such failures of equipment or systems, including but
47 not limited to electrical, any wastewater treatment division operational protocol,
48 procedure or practice, and any staff training, decisions and actions of the on-site crew
49 during or leading up to the event;
- 50 c. a description and evaluation of the wastewater treatment division's
51 immediate and subsequent responses to the event, including communications after the
52 event to stakeholders and the public and internal reporting and tracking processes;
- 53 d. an evaluation of how the flooding of the plant could have been averted;
- 54 e. an evaluation of the plant's power systems, both leading to the plant, and
55 within the plant, with any recommendations for opportunities to strengthen system
56 redundancy and avoid power disruptions or abnormalities that may require emergency
57 crew response;
- 58 f. a description of the environmental impacts from the discharge of untreated
59 or minimally treated wastewater and stormwater, including impacts related to wastewater
60 bacteria, as well as metals and other toxins, associated with the event;
- 61 g. a description of the public health impacts resulting from the event;
- 62 h. recommendations of appropriate preventive approaches, strategies, practices
63 or systems to avoid recurrence of extended suspensions of full operation of the

64 wastewater treatment at the plant, consistent with the plant's National Pollutant Discharge
65 Elimination System ("NPDES") permit and state and federal laws;

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

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

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

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

82 3. The consultant should deliver its final report simultaneously to the council
83 and the executive by July 1, 2017, or at other date mutually agreeable between the
84 council chief of staff and the contractor. The consultant shall deliver the report to the
85 council in the form of a paper original and an electronic copy to the clerk of the council,
86 who shall retain the original and provide an electronic copy to all councilmembers, the

87 council chief of staff and the lead staff for the regional water quality committee, or its
88 successor. The council may require interim reports on a periodic basis.

89 4. The wastewater treatment division shall work closely with the consultant by
90 providing any and all assistance and access to information as requested by the consultant
91 in furtherance of its review. The wastewater treatment division also shall participate in
92 an exit meeting with the consultant to address the findings and recommendations of the

93 report. The council by subsequent council action shall provide for reporting on the
94 implementation of recommendations of the consultant.
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KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

ATTEST:

J. Joseph McDermott, Chair

Melani Pedroza, Acting Clerk of the Council

APPROVED this ____ day of _____, _____.

Dow Constantine, County Executive

Attachments: None