

1 Q. **Tab 27; Volume II: Implement Terminal Station Flood Mitigation – Springdale**
2 Hydro states on page 2 that “the installation will be designed to prevent flooding of
3 the terminal station during a 1 in 100 year rainfall event.”

4
5 What is the criteria for a 1 in 100 year rainfall event in terms of amount of rain,
6 duration of rainfall, and any other significant characteristics that define a rainfall as
7 being a 1 in 100 year event?

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10 A. 24 hour Rainfall Intensity-Duration-Frequency Data, as recorded at the Office of
11 Climate Change’s Comfort Cove Climate Station (8401259, EC 2014), was utilized for
12 the hydraulic modelling exercise. This station was selected based on its relative
13 elevation and proximity to the Springdale Terminal Station.

14
15 Rainfall data for the 1/100 year return period shows a 24 hour rainfall accumulation
16 of 91.3 mm, with an average hourly rainfall intensity of 2.9 to 4.7 mm/hr.