

***These exercises are intended to support your self-directed learning. Answer the questions based on the SPM Version 3 standards and guidelines for determination of daily design flow (DDF) and the limited information provided within each question. Assume that the sewage is characterized as 'typical residential' with no unusual circumstances that affect DDF. Then check the answer key - which includes some helpful SPM references and notes.***

1. What is the minimum DDF for a 3 bedroom residence with 280 m<sup>2</sup> of living area?
2. What is the minimum DDF for a 3 bedroom residence with 230 m<sup>2</sup> of living area?
3. What is the minimum DDF for a 3 bedroom residence with 300 m<sup>2</sup> of living area?
4. What is the minimum DDF for a 5 bedroom residence with 400 m<sup>2</sup> and with anticipated occupancy is 8 persons?
5. What is the minimum DDF for a sewerage system that will serve a 2 bedroom residence with 200 m<sup>2</sup> of living area and a secondary suite within a detached garage that has 1 bedroom and 55 m<sup>2</sup> of living area? Projected occupancy is 3 persons in the 2 bedroom primary residence and 2 persons in the 1 bedroom secondary residence.
6. What is the minimum DDF for a two story residence, where the upper floor has 3 bedrooms and 200 m<sup>2</sup> of living area, and a full basement (200 m<sup>2</sup>) that is currently unfinished? The owner plans to finish the basement as a games room, exercise area, bar and a bathroom. Projected occupancy is no more than 3 persons.

