



MEMORANDUM

TO: Health District Environmental Health Directors
Health District Environmental Health Supervisors
Health District Environmental Health Program Managers
DEQ Wastewater Program Staff – State Office
DEQ Regional Office Administrators
DEQ Regional Office Engineering Managers

FROM: Peter Adams, DEQ On-Site Wastewater Coordinator

THROUGH: Mary Anne Nelson, DEQ Surface & Wastewater Division Administrator

DATE: September 8, 2022

SUBJECT: Use of Multiple Septic Tanks in Series

IDAPA 58.01.03.007.16 allows for multiple septic tanks to be used in series so long as the sum of their liquid capacities is at least equal to the *minimum tank capacity* computed in IDAPA 58.01.03.007.07 and the initial tank or compartment has a liquid capacity of more than 50% but no more than 67% of the total liquid capacity of the *septic tank facility*. The intent of this Rule is to prevent excessive accumulations of solids in the initial tank or compartment which may lead to premature failure of the subsurface system.

This memorandum is intended to provide guidance on the use of multiple septic tanks in series. The use of multi-compartment septic tanks is already addressed in the June 2, 2014 DEQ memorandum titled “Septic Tank and Dosing Chamber Uses.”

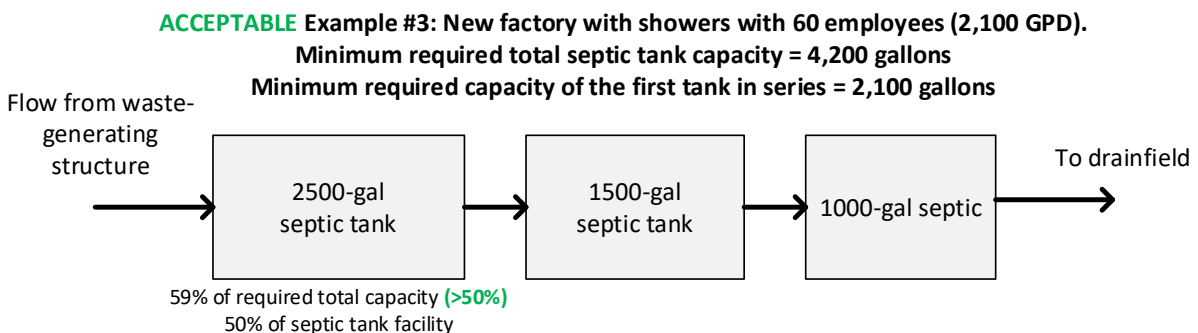
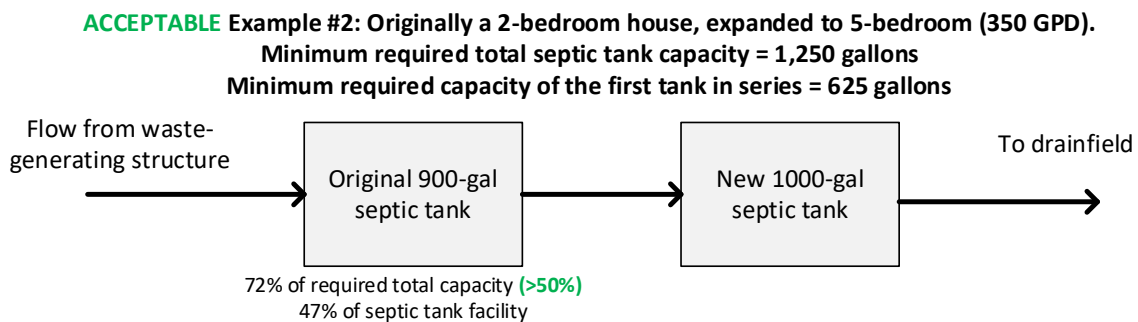
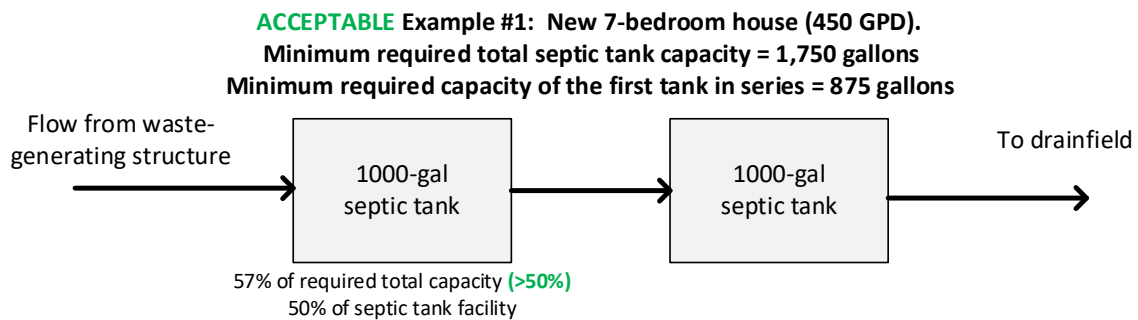
Septic Tank Facility is defined herein as a septic tank or series of septic tanks preceding a subsurface disposal system. Tanks or compartments used for housing pretreatment products or used as dosing chambers are not considered part of the *septic tank facility*. The total liquid capacity of the *septic tank facility* may be larger than the required *minimum tank capacity*.

Minimum Tank Capacity, per IDAPA 58.01.03.007, refers to the minimum required total liquid capacity of the *septic tank facility*.

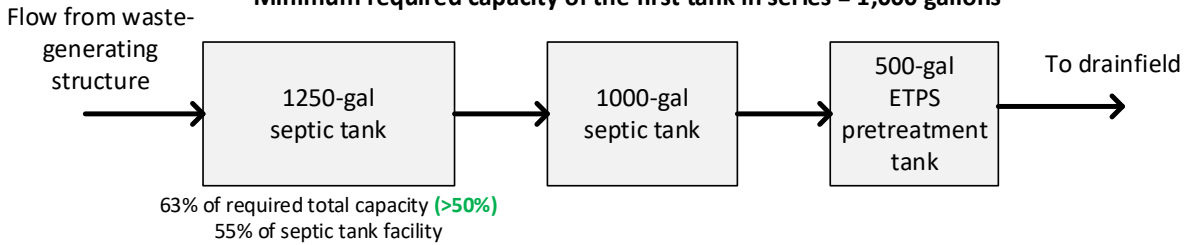
IDAPA 58.01.03.010.01 gives DEQ authority to make minor technical allowances to dimensional requirements of the Rule. Under this authority, DEQ requires that the first septic tank in a multiple-tank *septic tank facility* contain at least 50% of the required *minimum tank capacity*.

If this requirement is met, and the total liquid capacity of the *septic tank facility* is at least equal to the required *minimum tank capacity*, subsequent tanks in a multi-tank *septic tank facility* may be any size.

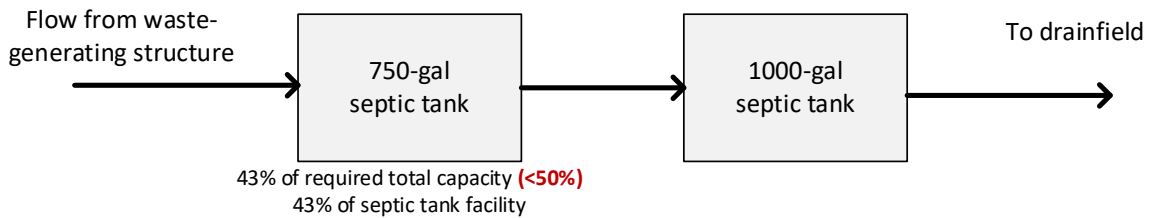
Examples provided below depict acceptable and unacceptable configurations of tanks in series.



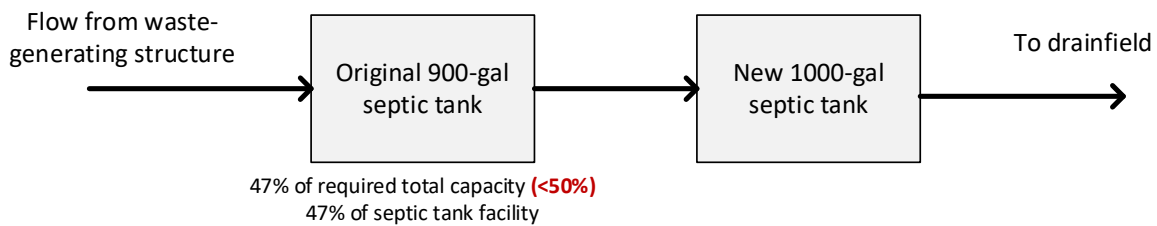
ACCEPTABLE Example #4: New office building with 50 employees (1,000 GPD), site requires pretreatment.
 Minimum required total septic tank capacity = 2,000 gallons
 Minimum required capacity of the first tank in series = 1,000 gallons



UNACCEPTABLE Example #1: New 7-bedroom house (450 GPD).
 Minimum required total septic tank capacity = 1,750 gallons
 Minimum required capacity of the first tank in series = 875 gallons



UNACCEPTABLE Example #2: Originally a 2-bedroom house, added a 3-bedroom accessory dwelling unit (200 GPD + 250 GPD). If both connect to the same system:
 Minimum required total septic tank capacity = 1900 gallons
 Minimum required capacity of the first tank in series = 950 gallons



UNACCEPTABLE Example #3: New factory with showers with 60 employees (2,100 GPD).
 Minimum required total septic tank capacity = 4,200 gallons
 Minimum required capacity of the first tank in series = 2,100 gallons

