

**GRADE II
WWTP OPERATOR
EXAMINATION INFORMATION**

The Grade II examination contains questions regarding the following subjects: basic safety practices, hazards encountered during wastewater treatment plant operations, sampling and simple analysis of wastewater constituents, and operation and maintenance procedures in preliminary and primary treatment unit processes, anaerobic sludge digestion and disinfection.

It also includes specific questions on the operation and maintenance of wastewater stabilization ponds and state regulations regarding the classification of wastewater treatment plants and operator certification.

In addition, the Grade II examination includes questions on secondary unit processes (e.g. trickling filters, activated sludge), sludge handling, evaluation of wastewater unit processes as well as overall plant performance and basic supervision responsibilities.

The Grade II examination also contains mathematical questions. Examinees may be asked to calculate a variety of problems including hydraulic or organic loading rate, SVI index, removal efficiency (% removal), activated sludge F/M ratio, activated sludge MCRT, pumping rate, sludge pumping rate, detention time, chlorine residual/demand, flow velocity, volume or surface area, overflow rate and nitrification. The examinee should be familiar with typical calculations related to the subject matter listed in paragraph 1.

Examinees are given 2 ½ hours to complete the examination. The question format is as follows:

50 True/False Questions	@	1 point each
30 Multiple Choice Questions	@	2 points each
10 Math Problems	@	4 points each

TOTAL POINTS 150

Passing Score: To pass, you must achieve:

(a) a minimum total score of 105 points (70 percent), AND
a score of at least 20 points (50 percent) on the ten Math Questions.