



Memo

To: State of Nevada Operator Certification Advisory Board
From: Kevin L. Malone
CC: Geoff DaForno
Date: Thursday, April 05, 2007
Re: March 2007 Treatment Operator Certification Exam Analysis

The following results are from the March testing cycle which is divided into three regional areas: Northern, Central and Southern Nevada. These results are in addition to the Distribution results sent in a separate Memo. The exam results were reviewed and an analysis was completed based on the March 14th, 2007 exam scores for Water Treatment Operators of Nevada. For each testing cycle, the intention of each analysis is to provide instructors with feedback on areas of deficiencies identified for the state.

Grade I – Treatment

Northern Nevada had the following topics as the most missed on the Grade I Water Treatment Operator Exam:

- ◆ Filtration
- ◆ Treatment Types and Processes
- ◆ Water Quality

Central Nevada had the following topics as the most missed on the Grade I Water Treatment Operator Exam:

- ◆ Treatment Types & Processes
- ◆ Water Treatment Mathematics
- ◆ Disinfection

Southern Nevada had the following topics as the most missed on the Grade I Water Treatment Operator Exam:

- ◆ Treatment Types and Processes
- ◆ Filtration

- ◆ Water Quality

Grade II - Treatment

Northern Nevada had the following topics as the most missed on the Grade II Water Treatment Operator Exam:

- ◆ Water Quality
- ◆ Treatment Types & Processes
- ◆ Water Treatment Mathematics

Central Nevada had the following topics as the most missed on the Grade II Water Treatment Operator Exam:

- ◆ Water Quality
- ◆ Treatment Types and Processes
- ◆ Water Treatment Plant Operations

Southern Nevada had the following topics as the most missed on the Grade II Water Treatment Operator Exam:

- ◆ Water Quality
- ◆ Treatment Types and Processes
- ◆ Filtration

Grade III – Treatment

Northern Nevada had the following topics as the most missed on the Grade III Water Treatment Operator Exam:

- ◆ There were no examinees for this area for the March 14TH, 2007 testing cycle

Central Nevada had the following topics as the most missed on the Grade III Water Treatment Operator Exam:

- ◆ Disinfection
- ◆ Filtration
- ◆ Water Quality

Southern Nevada had the following topics as the most missed on the Grade III Water Treatment Operator Exam:

- ◆ Filtration
- ◆ Water Quality
- ◆ Treatment Types and Processes

Grade IV – Treatment

Northern Nevada had the following topics as the most missed on the Grade IV Water Treatment Operator Exam:

- ◆ Water Quality
- ◆ Utility Management
- ◆ Treatment Types & Processes

Central Nevada had the following topics as the most missed on the Grade IV Water Treatment Operator Exam:

- ◆ Water Quality
- ◆ Filtration
- ◆ Treatment Types and Processes
- ◆ Water Treatment Mathematics

Southern Nevada had the following topics as the most missed on the Grade IV Water Treatment Operator Exam:

- ◆ Water Quality
- ◆ Treatment Types and Processes
- ◆ Filtration

Recommendations

This analysis is done to identify the deficiencies in each region for educational information only. The results should show a lack of knowledge in the areas of Water Quality, Treatment Types & Processes and Filtration. The books we recommend for these areas are:

1. **Water Quality** (*Principles and Practices of Water Supply Operations*)
2. **Water Transmission and Distribution** (*Principles and Practices of Water Supply Operations*)
3. **Water Distribution Operators Training Handbook**
4. **Water Treatment Textbook** (*Principles and Practices of Water Supply Operations*)
5. **Water Treatment Operators Training Handbook**

All books can be purchased at AWWA, California-Nevada Section, 10574 Acacia St., Ste D-6 Rancho Cucamonga, CA 91730 909-481-7200

We hope this will assist in providing the necessary information to educational providers.