

Preparing for Your Exam:

To prepare effectively, decide how much time you'll need. NGWA exams are designed by professionals to reflect best practices in the groundwater industry. While practical experience is essential, studying the recommended materials is key to success.

- **Review the Exam Study Guide:** Familiarize yourself with the key topics covered in the exam. Use the content outline to assess your strengths and identify areas that need more focus.
- **Use NGWA's Recommended Study Materials:** Check out the resources available in the NGWA bookstore. This study guide outlines the materials that align with each exam section and will help deepen your knowledge.
- **Plan Your Study Time:** Break your study sessions into smaller, focused blocks for better retention.
- **Customize Your Study Method:**
 - Take notes, create flashcards, or study with a group.
 - Have someone read the material aloud while you take notes.
 - If you're a visual learner, draw diagrams or process flows.
 - For hands-on learners, discuss practical topics with coworkers or equipment manufacturers.
 - Reinforce what you've learned by explaining it to someone else.

Resources referenced in the study guide available in

NGWA's Bookstore:

- *Environmental Remediation Drilling Study Guide*
- *Employee Safety Manual, Second Edition*
- *Groundwater & Wells, Third Edition*
- *Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells*
- *Manual of Water Well Construction Practices*
- *Procedures for Well Drilling Operations*
- *Transfer of Technology*
- *Water Well Driller's Beginning Training Manual*

Scheduling Your Exam:

- Schedule your exam online at <https://test-takers.psiexams.com/ngwa> or by calling 855-579-4642 and ask to schedule the National Groundwater Association's Mud Rotary Exam.
- Frequently asked questions about the exam process may be found at [Test Taker Support | Candidate FAQ.](#)
- If you have trouble with scheduling your exam, please contact NGWA at certification@ngwa.org or 800-551-7379, ext. 1526.

Before Your Scheduled Exam:

- **Know What to Expect:** Boost your confidence by familiarizing yourself with the exam process. Review the test center's requirements and policies, which are outlined in [NGWA's Candidate Information Bulletin.](#)

- **Arrive Early:** Plan your route to the test center in advance and be sure to allow extra time for any unforeseen circumstances.
- **Rest Well:** Aim for a full night's sleep before the exam. Avoid cramming, as staying up late can negatively affect your performance.
- **Check-In Requirements:** You will need to present a valid, government-issued ID when checking in at the test center.
- **Leave Personal Items Behind:** Personal belongings are not permitted in the test center. Please store them securely before entering.
- **Closed-Book Exam:** No outside materials are allowed, so be sure to leave any study aids behind.
- **Eat Light:** Have a nutritious, light meal before your exam.
- **Stay Positive:** Set realistic expectations for yourself. While it's great to aim for a perfect score, missing a few questions is completely normal-and won't affect your ability to pass.
- **Manage Anxiety:** If you start to feel nervous, take a few deep breaths and consciously relax the tension in your neck and shoulders. Keeping calm will help you focus.

After Your Exam:

- You will receive your score report before leaving the test center. If you didn't pass, check the "scores by section" area below your pass/fail result. These sections align with the categories listed on this study guide. Use this information to guide your studying for the next exam attempt.
- Keep a notebook in your car to jot down any content areas or questions you found challenging. Then, refer to the exam study guide to find relevant study materials and review those topics to strengthen your understanding.

NGWA Study Materials Listed by Mud Rotary Exam Category

Mobilize for the Site (9 questions)

- *Employee Safety Manual, Second Edition*
 - Personal Protective Equipment, page 4
- *Groundwater & Wells, Third Edition*
 - Chapter 7 – Well Drilling Methods
 - Chapter 10 – Water Well Construction and Abandonment

- *Handbook of Suggested Practices of the Design and Installation of Ground-Water Monitoring Wells*
 - Chapter 4 – Description and Selection of Drilling Methods
- *Manual of Water Well Construction Practices*
 - Chapter 7- Well Plumbness and Alignment
- *Procedures for Well Drilling Operations*
 - Chapter 5 – Well Drilling Methods
 - Chapter 3 – Field Operations
- *Water Well Driller's Beginning Training Manual*
 - Chapter 4 – Introduction to Rotary Drilling
 - Chapter 5 – Air Rotary and Air Hammer Drilling
 - Chapter 6 - Introduction to Reverse Circulation Drilling

Construct Water Well (18 questions)

- *Groundwater & Wells, Third Edition*
 - Chapter 4 – Borehole Geophysics
 - Chapter 5 – Groundwater Chemistry
 - Chapter 7 – Well Drilling Methods
 - Chapter 8 – Drilling Fluid
 - Chapter 9 – Production Water-Well Design
 - Chapter 10 – Water Well Construction and Abandonment
- *Handbook of Suggested Practices of the Design and Installation of Ground-Water Monitoring Wells*
 - Chapter 4 – Description and Selection of Drilling Methods
 - Manual of Water Well Construction Practices
 - Chapter 2 – Methods of Well Construction
 - Chapter 4 – Well Grouting
 - Chapter 5 – Well Screens and Intakes
 - Chapter 2 – Types of Drilling Machines
- *Procedures for Well drilling Operations*
 - Chapter 5 – Well Drilling Methods
 - Chapter 6 – Well Installation Procedures
 - Chapter 11 – Auxiliary Activities
- *Water Well Driller's Beginning Training Manual*
 - Chapter 3 – Cable Tool Drilling
 - Chapter 4 – Introduction to Rotary Drilling
 - Chapter 5 – Air Rotary and Air Hammer Drilling
 - Chapter 6 - Introduction to Reverse Circulation Drilling
 - Chapter 9 – Well Screens

- Chapter 10 – Water-Well Construction and Abandonment
- *Transfer of Technology*
 - Section 1 – Mud Pumps
 - Section 2 – Mud Flow
 - Section 5 – Blocks, Pulleys, Wireline

Prepare/Manage Drilling Fluids (17 questions)

- [*Environmental Remediation Drilling Study Guide*](#)
 - Chapter 4 – Drilling Operations (Decontamination)
- *Groundwater & Wells, Third Edition*
 - Chapter 5 – Groundwater Chemistry
 - Chapter 7 – Well Drilling Methods
 - Chapter 8 – Drilling Fluid
 - Chapter 12 – Groundwater Pumps
- *Handbook of Suggested Practices of the Design and Installation of Ground-Water Monitoring Wells*
 - Chapter 5 – Design Components of Monitoring Wells
- *Procedures for Well drilling Operations*
 - Chapter 5 – Well Drilling Methods
 - Chapter 11 – Auxiliary Activities
- *Transfer of Technology*
 - Section 1 – Mud Pumps
- *Water Well Driller's Beginning Training Manual*
 - Chapter 4 – Introduction to Rotary Drilling
 - Chapter 6 - Introduction to Reverse Circulation Drilling
 - Chapter 7 – Jetting

Develop Wells (5 questions)

- *Groundwater and Wells, Third Edition*
 - Chapter 6 – Aquifer-Test Data Collection and Analysis
 - Chapter 8 – Drilling Fluid
 - Chapter 9 – Production Water-Well Design
 - Chapter 11 – Development of Water Wells
- *Manual of Water Well Construction Practices*
 - Chapter 5 – Well Screens and Intakes
 - Chapter 8 – Well Development
 - Chapter 9 – Well Testing for Performance

- *Water Well Driller's Beginning Training Manual*
 - Chapter 11 – Developing the Well
 - Chapter 12 – Testing the Well
 - Chapter 14 – Water System Sizing and Selection
- *Procedures for Well drilling Operations*
 - Chapter 3 – Field Operations
 - Chapter 6 – Well Installation Procedures
 - Chapter 8 – Well Performance Testing Procedures

Demobilize the Site (1 question)

- *Water Well Driller's Beginning Training Manual*
 - Chapter 15 – Records and Reports