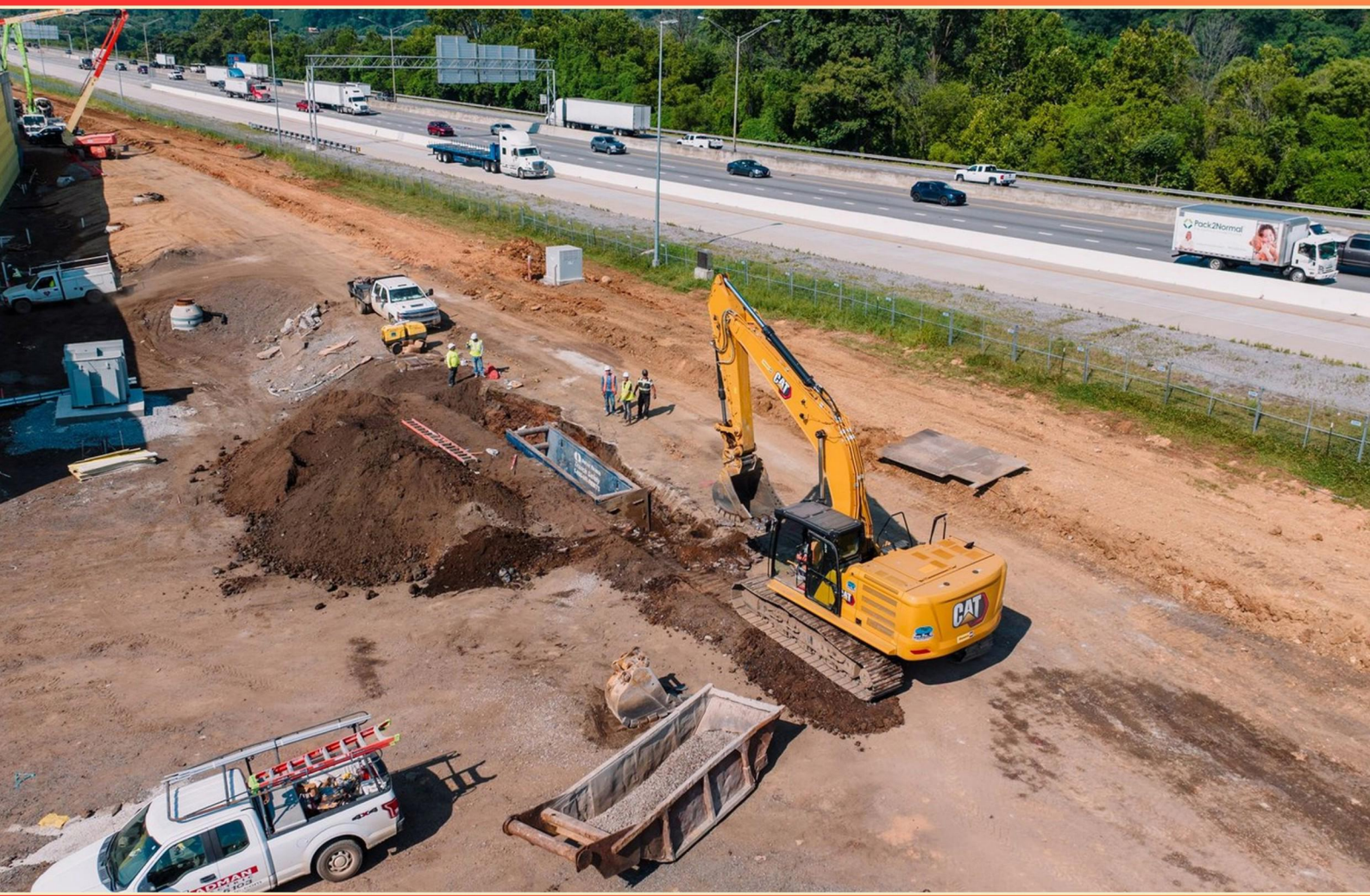
NGA 71: OPERATOR EXCAVATING AND BACKFILLING IN THE VICINITY OF A PIPELINE (CRITICAL AOC) PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What are the three components of a Job Safety Analysis (JSA) for NGA 71 operations?

A. Hazard identification, risk assessment, and management of project timelines.

B. Risk assessment only.

C. Identification of hazards and PPE only.

D. Hazard identification, risk assessment, and selection/implementation of control measures (engineering, administrative, and PPE).

2. How do you keep a ditch from caving in?

A. Shoring/trench boxes

B. Deepening the trench

C. Using tape

D. Reducing soil moisture

3. If part of the pavement where the excavation is being performed becomes undetermined, what action must be taken for that portion?

A. Removed

B. Shoring must be installed

C. Removed or shoring will need to be installed

D. Left in place

4. How many days after you call 811 are you allowed to start work?

A. The day after notification

B. On the same day

C. Third working day after notification

D. Five working days after notification

5. What signs of a potential pipeline leak should prompt immediate cessation of excavation?

A. Mild odor only

B. Color changes in soil without odor or sounds.

C. Hissing/roaring, strong gas odor, visible gas seep, bubbling water, or vapor plumes; evacuate and alert operator.

D. Water pooling near the trench with no odor.

6. How should you verify that a pipeline is properly located and not shifted between tickets?

A. Rely solely on the first locate ticket.

B. Cross-check locate marks with latest operator data, review as-built drawings, and, if needed, perform a live exposure to confirm current location.

C. Assume location is fixed and ignore checks.

D. Use magnetic detection without exposure.

7. What should you do if utility markings are not legible?

A. Call 911

B. Contact 811 wait for remarking before excavation

C. Ignore the markings

D. Dig around until markings appear

8. If excavation is planned within 200 feet of a gas regulator or gate station, whom must be notified?

A. 50 feet

B. 100 feet

C. 150 feet

D. 200 feet

9. What is the recommended depth above the pipe that the primary backfill should reach?

A. About one foot above the pipe

B. About two feet above the pipe

C. At the surface

D. Three inches above the pipe

10. What is the recommended method for exposing a pipeline within the Critical AOC?

A. Use mechanical digging without supervision.

B. Use non-destructive methods (vacuum excavation) or careful hand-digging with exposure area, under direct supervision and operator presence.

C. Expose entire length by blasting.

D. Use explosive blasting to expedite exposure.

Answers

1. D
2. A
3. C
4. C
5. C
6. B
7. B
8. D
9. A
10. B

Explanations

1. What are the three components of a Job Safety Analysis (JSA) for NGA 71 operations?

A. Hazard identification, risk assessment, and management of project timelines.

B. Risk assessment only.

C. Identification of hazards and PPE only.

D. Hazard identification, risk assessment, and selection/implementation of control measures (engineering, administrative, and PPE).

In NGA 71 operations, a Job Safety Analysis is a structured way to manage hazards for a specific task near a pipeline. It has three parts: first, hazard identification—systematically spotting all potential hazards associated with the job and site conditions; second, risk assessment—evaluating how likely and how severe the harm could be from each hazard; and third, selection and implementation of control measures—choosing and applying appropriate controls to lower risk, including engineering controls (design changes, isolation, barriers), administrative controls (procedures, permits, training, supervision), and personal protective equipment. This approach ensures safety is planned into every step of the job and adjusted if conditions change.

2. How do you keep a ditch from caving in?

A. Shoring/trench boxes

B. Deepening the trench

C. Using tape

D. Reducing soil moisture

Using shoring or trench boxes is the reliable way to keep a ditch from caving in. These protective systems are designed to hold up the trench walls, transferring earth pressures to a structure that resists collapse. They create a stable, safe workspace even in unstable or saturated soils, which is especially important when working near pipelines where movement or loads could endanger the line. Protective systems are chosen based on soil type and trench depth and must be installed by trained workers under a competent-person plan. This approach directly addresses the force that causes cave-ins, making it the best method. Deepening the trench tends to increase the risk of a collapse by adding more unsupported wall area. Tape offers no structural support, and trying to reduce soil moisture isn't a reliable or sufficient way to prevent a cave-in.

3. If part of the pavement where the excavation is being performed becomes undetermined, what action must be taken for that portion?

A. Removed

B. Shoring must be installed

C. Removed or shoring will need to be installed

D. Left in place

When the pavement area over an excavation has undetermined conditions, you must take protective action to prevent failure. Since the under-surface condition isn't known, the segment must be addressed by either removing the pavement to expose the area and provide proper support, or by installing shoring to support the pavement and keep it from collapsing into the excavation. Leaving the pavement as-is is not acceptable because unknown conditions could lead to a hazard for workers and the pipeline. Removal is chosen when access and inspection are needed to ensure stability, while shoring is used when it's feasible to preserve the pavement with temporary support. In short, that portion must be either removed or shored.

4. How many days after you call 811 are you allowed to start work?

A. The day after notification

B. On the same day

C. Third working day after notification

D. Five working days after notification

After you call 811, you're expected to wait for the utility lines to be located and marked before you start digging. The allowed start time is on the third working day after notification. This gives the utility companies two full business days to respond and mark their lines, plus one more day to review the markings and proceed safely. For example, if you call on Monday, you can start on Thursday. Starting earlier (the next day or the same day) wouldn't give enough time for markings, and waiting five working days is longer than the standard requirement. The markings and safe distances from them protect you and the existing underground infrastructure from damage.

5. What signs of a potential pipeline leak should prompt immediate cessation of excavation?

A. Mild odor only

B. Color changes in soil without odor or sounds.

C. Hissing/roaring, strong gas odor, visible gas seep, bubbling water, or vapor plumes; evacuate and alert operator.

D. Water pooling near the trench with no odor.

In excavation near pipelines, any sign that gas may be escaping indicates an immediate hazard. The presence of hissing or roaring sounds, a strong gas odor, a visible gas seep, bubbling water, or vapor plumes means gas could be in the trench or surrounding soil, so work must stop right away, workers should evacuate to a safe distance upwind, and the pipeline operator must be alerted so the leak can be evaluated and mitigated. These signs are direct indicators of a potential release and require urgent action. Milder cues, like a faint odor alone, color changes in soil without odor or noise, or water pooling with no odor, aren't reliable on their own to confirm a leak and don't by themselves mandate immediate stopping. They require cautious assessment under the site's procedures and may lead to further investigation with proper equipment before stopping work. Always follow your specific emergency procedures and contact the operator if you think there might be a leak.

6. How should you verify that a pipeline is properly located and not shifted between tickets?

A. Rely solely on the first locate ticket.

B. Cross-check locate marks with latest operator data, review as-built drawings, and, if needed, perform a live exposure to confirm current location.

C. Assume location is fixed and ignore checks.

D. Use magnetic detection without exposure.

Verifying a pipeline's location requires using up-to-date, corroborated information rather than trusting a single mark. The safest and most reliable approach is to cross-check the locate marks against the latest operator data, review the as-built drawings to see how the line is actually installed, and, if there's any doubt or mismatch, perform a live exposure to confirm the current location in the trench. This combination catches changes that can occur between tickets—such as shifts, relocation, or damaged/moved markers—and ensures you're working with the true position and depth right before excavation. Relying only on the first locate ticket can be misleading, since information can become outdated or inaccurate over time. Assuming the line is fixed and skipping checks is unsafe and could lead to striking the pipeline. Magnetic detection without exposing the pipe isn't sufficient either—it may indicate presence but won't reliably confirm the exact path and current location, especially if conditions are challenging or the pipe isn't easily detectable.

7. What should you do if utility markings are not legible?

A. Call 911

B. Contact 811 wait for remarking before excavation

C. Ignore the markings

D. Dig around until markings appear

When utility markings aren't legible, pause any digging and contact 811 to have the underground lines re-marked before you continue. This service connects you with the utility owners responsible for those lines, so they can locate and clearly mark what's buried in the area. Clear marks are essential to know exactly where not to dig and to avoid hitting a pipe or cable. After you call 811, wait for the re-marking before proceeding. The crews will come out to re-mark the area, and you should only begin work once the markings are readable and up to date. This process helps prevent dangerous escapes, fires, or service outages that can happen if you excavate without accurate information. Avoid alternatives like calling emergency services or continuing to dig without refreshed marks. Emergency responders aren't for locating buried utilities, and digging around until you see something can put you and others at serious risk. The safe course is to pause, call 811, and wait for proper re-marking.

8. If excavation is planned within 200 feet of a gas regulator or gate station, whom must be notified?

A. 50 feet

B. 100 feet

C. 150 feet

D. 200 feet

When digging near critical gas infrastructure, you coordinate with the gas utility operator to protect people and the pipeline. If your excavation is planned within 200 feet of a gas regulator or gate station, you must notify the gas utility operator. This notification allows the operator to provide guidance, mark critical components, and be prepared to take any necessary safety actions. The 200-foot boundary is the threshold that triggers this contact; outside that range, this specific notification requirement does not apply, though you should still follow general safe digging practices and any other applicable regulations. The party to notify is the gas utility/pipeline operator.

9. What is the recommended depth above the pipe that the primary backfill should reach?

A. About one foot above the pipe

B. About two feet above the pipe

C. At the surface

D. Three inches above the pipe

The main idea is that the first, or primary, backfill around a buried pipe should be a compacted layer that surrounds and supports the pipe. You want enough material packed around the pipe to stabilize it and distribute loads, but you don't want to bury it under non-compact material or leave it exposed. For this reason, the target is about one foot of backfill above the top of the pipe. This provides solid support and helps prevent movement or settlement, while still allowing the surface to be finished with the remaining backfill (secondary backfill) up to grade. The other options would either leave the pipe too exposed, not provide adequate load distribution, or overbuild the surrounding material, which isn't how the backfill is typically staged. So the best choice is about one foot above the pipe.

10. What is the recommended method for exposing a pipeline within the Critical AOC?

A. Use mechanical digging without supervision.

B. Use non-destructive methods (vacuum excavation) or careful hand-digging with exposure area, under direct supervision and operator presence.

C. Expose entire length by blasting.

D. Use explosive blasting to expedite exposure.

Safely exposing a pipeline in a Critical AOC hinges on using non-destructive methods or careful hand-digging for an exposure, with direct supervision and the excavating operator present on site. Non-destructive techniques like vacuum excavation remove soil around the pipe using controlled suction, reducing the chance of damaging the pipeline and cutting or puncturing it. If hand-digging is used, it should be limited to the exposure area and performed with careful, controlled digging to avoid contact with the pipe. The presence of a supervisor and the operator ensures proper procedures are followed, the area is kept within safe limits, utilities are identified, and work can be halted if any issues arise. In contrast, approaches involving mechanical digging without supervision or any blasting or explosive methods introduce high risk of damaging or compromising the pipeline and are not appropriate for exposing it in this context.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://nga71.examzify.com

We wish you the very best on your exam journey. You've got this!