

CESSWI EXAMPLE QUESTIONS

ECI has provided the following questions as examples as to what to expect on the Certification Exam for CESSWI. An answer sheet with a brief explanation is provided after the questions.

Example Questions:

1. The primary role of an Inspector is:

- a. to make judgment decisions for the design to prevent potential pollutant release(s)
- b. to collect information necessary to determine compliance
- c. to make management practice recommendations
- d. to resolve conflicts with contractors or installers on sites

2. A good inspection report should include (select best answer):

- a. name and qualifications of subcontractors
- b. contact information of the management practices installer
- c. information from the last regulatory inspection
- d. list of all relevant management practices
- e. all of the above

3. When inspecting runoff control areas an inspector should ensure:

- a. they are completely free of sediment, trash, and debris
- b. they are designed to handle high volumes of water
- c. measures are designed to prevent scour given the runoff velocities
- d. they are placed at strategic areas on the site
- e. all of the above

4. Which of these report writing practices is appropriate?

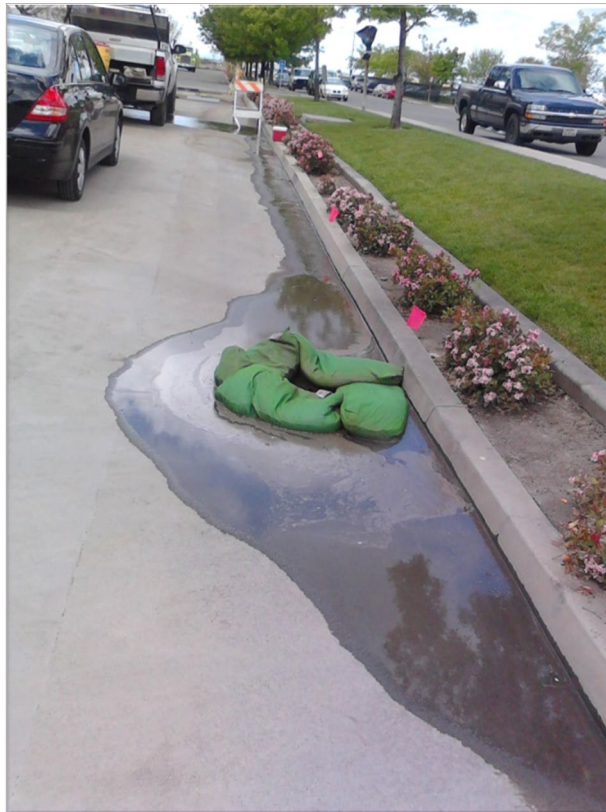
- a. making personal comments on reports
- b. just provide pictures
- c. copying previous reports to save time
- d. writing the report at the office
- e. none of the above

5. When assessing the site, the Inspector should report:

- a. Discolored flow running onto the site from surrounding properties
- b. depth and velocity of flows in an adjacent channel
- c. turbidity measurements from water samples
- d. a & c
- e. b & c

- 6. During a heavy storm, the inspector arrives at the site to take pH and turbidity tests. Unfortunately, the turbidity meter does not work and a new meter will not be available for a few days, and no other company can lend him their meter. What is the best solution for the inspector?**
- a. describe the color of the flow to his supervisor
 - b. use the values from the previous storm
 - c. report the maximum allowable benchmark value stated in the permit that is allowed to discharge the site
 - d. collect representative water samples at appropriate discharge locations and place in a suitable container
- 7. Which is not an inspection item when inspecting mulched areas?**
- a. holes or tears in containment devices
 - b. mulch placed near tree trunks
 - c. thickness
 - d. none of the above

8. In the picture below you observe discharge downstream and draining from construction of a new building where the contractor washed dry cement powder from broken bags. The flow has left the construction site and is being conveyed down the City street in the curb & gutter into a City MS4 catch basin. The consulting inspector states the pH is ranging from 9 to 13, and is required by permit to be less than 7.5. As a jurisdictional inspector you should:



- a. issue a stop work order and require that the contractor immediately take action to prevent any further discharge to the catch basin and leaving the site
- b. ignore the violation, and allow the contractor to wash the materials top the catch basin because the extra water from the storm drains will dilute the contaminate
- c. ignore the violation because the water is clear and shows no signs of cement contamination.
- d. have additional water flushed down the system to dilute the contamination so the pH reported values will be within acceptable limits

9. While inspecting a construction site in an urban area you notice the inlet protection seen in the picture below. The contractor has explained to you that this inlet has been a problem throughout the construction process and has asked you how to resolve the issue. You should:



- a. perform the necessary repairs yourself
- b. have the contractor remove, clean up, and reinstall a new management practice that the contractor believes will work best using materials from the site
- c. ask the contractor to contact the designer of record to assess and provide a management practice or remedial repair
- d. require a 25 hp pump to the next catch basin

10. Existing vegetation on the site below had just been cleared and grubbed. Temporary straw mulching had been applied but not tackified or anchored. The permit requires the site SWPPP to mitigate a 25 year event. During the weekend following the clearing the area experienced a year storm. A local newspaper had published the picture below with a scathing commentary on overdevelopment and lack of environmental protection. You are the inspector for the project. When you arrive at the site in the morning, what is the best course of action?



- a. respond to the newspaper defending the design
- b. have to contractor contact the municipality to clean the public roadway
- c. observe the performance of the various management practices, assess damage, and contact the CPESC to assist with providing mitigation measures or new management practices
- d. require the contractor to reinstall the same management practices recommended but increase the height of the site fence and number of gravel bags

CESSWI ANSWER SHEET WITH ANNOTATED ANSWERS

Question 1: The correct answer is b. The role of the inspector is to collect the necessary information in regard to site compliance (and note associated shortcomings) relative to the design plans and reports.

- a. is incorrect because as an inspector your responsibility is strictly that of observations and documentation of the project Management Practice(s) implementation, not design considerations
- c. is incorrect because if the inspector makes recommendations as to management practices, this is the duty of the CPESC/CPSWQ/PE
- d. is incorrect because the inspector is not an arbitrator

Question 2: The correct answer is d. The other three answers are not required to determine compliance of the site.

Question 3. The correct answer is a. The inspector needs to ensure that all runoff areas are functioning properly per design

b, c, d is incorrect as it is not the inspector's responsibility to design.

Question 4. The correct answer is d. While writing the inspection report onsite prior to leaving the site and submitting it to the appropriate parties is the preferred method, this is not always a viable option. The report should be written and filed as soon as possible after the inspection so long as appropriate documentation is obtained and referenced.

- a. is incorrect as the inspector is required to note what the actual conditions are on the site, not make personal comments as to why the situation exists and what may have caused it
- b. while photographs are an essential tool, written/typed observations of site conditions, management practices, etc., are generally required. handwritten notes are allowed and must be retained, they must be clear and legible.
- c. is incorrect as previous reports may be a good starting point for consistent formats and to address any past issues, each report should be a standalone reporting of the observations of site conditions at the time of the inspection

Question 5. The correct answer is d. The inspector should report observations and discoloration may be evidence of a stormwater or non-stormwater pollution event. Turbidity measurements are generally reported.

- b. is incorrect because the inspector is generally reporting observations at the site but not analytical assessments.

Question 6. The correct answer is d.

- a. is wrong as color may be dependent on the materials being transported but not a direct relationship to the actual NTU value.
- b. is incorrect because upstream conditions and storm characteristics may vary the results.
- c. is incorrect as these values have no reflection on site values.

Question 7 The correct answer is d. All of the three items listed, holes or tears in containment devices, mulched placed near tree trunks (proper installation should not be touching the tree trunk), and thickness of the mulch to match the design parameters, need to be inspected.

Question 8 The correct answer is a. It is the responsibility of a jurisdictional inspector to protect the health, welfare, and safety of persons and property. In issuing the stop work order the inspector stops the source of the discharge and directs the contractor responsible to cleanup any affected areas.

b and d are incorrect because the pollutant left the site and is therefore a violation.

Further diluting the pollutant does not mitigate the condition, as the volume of pollutant (in this case cement), is still present and will degrade the downstream receiving waters.

c. is incorrect because your eyes are not able to measure particulate or non-visible pollution and the reported pH provides positive evidence of a pollutant.

Question 9 The correct answer is c. It is not the inspector's responsibility to design the proper method of protection for the inlet. The responsibility falls upon the designer of record.

a. is incorrect it is not in the inspectors preview to perform repairs.

b. is incorrect. While the contract may have a correct solution, the management practices should come from the designer.

d. is incorrect because it is not within the inspector's purview to make design recommendations.

Question 10 The correct answer is c. The inspectors responsibility is to observe and report their observations. These observations may be critical for future assessments,

- a. is incorrect because the inspector is not professionally qualified to assess the competency of the design measures, only that they were implemented properly and assess performance
- b. is incorrect. It may be necessary to contact the municipality, but the responsibility of the road clean up will need to be coordinated between the contractor and the municipality. For instance, the municipality may have certain insurance requirements or limits that prevent the contractor from performing such work in a public right of way, etc.
- d. is incorrect because the plan and associated management practices failed during a 10-year event and were supposed to be designed for a 25-year event. It is the duty of the designer to assess and make recommendations for proposed improvements.