

Provided by Montana Department of Environmental Quality UST Section

Introduction

What Is The Purpose Of This Quiz?

This quiz is designed to provide you with a way of demonstrating to the Department of Environmental Quality (DEQ) that you understand your Underground Storage Tank (UST) system and the laws and regulations that are enforced at your facility.

Why do I have to participate in Operator Training?

In August of 2005 Congress passed the Energy Policy Act of 2005. One part of this Act requires that operators of UST systems be trained in accordance with the Environmental Protection Agency guidelines. Each facility must have at least one Class A, Class B and Class C operator trained.

What Is Class B operator training?

A Class B Operator is the individual who ensures someone is conducting the proper operation and maintenance on the UST systems. The operator training course focuses on educating owners and operators about their UST systems. This includes the existing State of Montana environmental regulations that apply to them and encourages stewardship of the environment around UST tanks and piping systems.

As a participant in Class B UST operator training, you will:

- **complete**, **sign**, **and send** the completed workbook quiz to DEQ. Once we receive the quiz, it will be graded. If you receive an 80% or better cumulative score you will be issued a Class A Operator Training certificate. Keep this certificate on file at your facility. This certificate is your proof that you have been trained. After passing the quiz you will be trained as a Class B Operator for any facility in the State of Montana.
- If the department determines that an UST system does not meet the Environmental Protection Agency's (EPA) significant operational compliance requirements for release prevention and release detection measures identified at <u>http://www.epa.gov/oust/cmplastc/soc.htm</u>, you will have to be retrained in the subjects in which the UST was found to be in significant non-compliance.

This document is not a substitute for the State of Montana law and regulations, nor is it a law or regulation itself. For a comprehensive and complete understanding of the law and regulations, please refer to <u>http://mt.gov</u>.

If you have any questions as you go through this quiz, please refer to the workbook for other resources or call the Department of Environmental Quality at 406-444-5300.

As a new owner or operator of an UST you must complete and return this operator training checklist to DEQ within 30 days of acquiring responsibility of the facility.

Class B Operator Training Information

Required Operator Training Information

I. Trainee Information			II. Location of Tanks			
Name			Facility Na	me or Company Site Identifier	, as applicable	
Mailing Address			Street Add	ress or Physical Location (PO	BOX NOT ACCEPTABLE)	
City	State	Zip	City	State	Zip	
Phone Number		Fax Number	DEQ Facili	ity ID # (list all numbers if trai	ning for more than one)	
E-mail Address						

Class B Operator Training Quiz

PLEASE NOTE THE FOLLOWING:

1. As a new owner or operator of an UST you must complete and return the operator training to the Department of Environmental Quality within 30 days of acquiring responsibility of the facility.

2. After receiving the operator training from you, the UST Section at the Department of Environmental Quality will grade your answers of the training quiz to determine if you passed. The Department will notify you of your results by mail and send a certification form if you pass. You must achieve a grade of 80% correct for a passing score.

3. If you or your facility is sent to the Enforcement Division of the Department of Environmental Quality, you will have to re-train in Operator Training for the areas that you are in non-compliance with.

Please specify the Type of Training that you are completing this Quiz for (circle one):

First Time Operator Training

Re-Training Due to Non-Compliance

Class B Operator Training Answer Sheet						
Name: Date:			Completely shade in the correct answer to each question.			
Administration	27. 🕘 🖲 🔘 🔘	52. & B © D	79. 🕘 🖲 🔘 🕕			
1. & B © D	28. A B C D	53. A B C D	80. A B C D			
2. A B C D		54. A B C D	81. & B © D			
3. A B C D	Spill and Overfill	55. A B C D	82. A B C D			
4. A B C D	29. & B © D	56. & B © D	83. & B © D			
5. A B C D	30. A B C D		84. A B C D			
6. & B © D	31. & ® © ©	Leak Detection	85. & B © D			
7. A B C D	32. A B C D	57. A B C D	86. A B C D			
8. A B C D	33. & B © D	58. A B C D	87. (A) (B) (C) (D)			
9. A B C D	34. A B C D	59. A B C D	88. A B C D			
10. A B C D	35. @ B C D	60. & B © D	89. A B C D			
11. A B C D	36. A B C D	61. A B C D	90. A B C D			
	37. @ ® © D	62. & B C D				
System Layout	38. A B C D	63. A B C D				
12. ^(A) ^(B) ^(C) ^(C)	39. & B © D	64. & ® © D				
13. A B C D	40. @ ® © D	65. A B C D				
14. ^A BCD	41. & B © D	66. & ® © D				
15. A B C D	42. A B C D	67. A B C D				
16. [©] ® © ©	43. & B © D	68. & ® © D				
17. 🖲 🖲 🔘	44. @ B © D	69. A B C D				
18. A B C D		70. & B C D				
19. A B C D	Corrosion Protection	71. A B C D				
20. A B C D	45. & B © D	72. & B O D				
21. A B C D	46. A B C D	73. A B C D				
22. A B C D	47. & B © D	74. & B © D				
23. A B C D	48. A B C D	75. A B C D				
24. A B C D	49. & B C D	76. & ® © D				
25. A B C D	50. @ B C D	77. & ® © D				
26. & B © D	51. & B © D	78. & B © D				

Quiz Section: Administration

- 1. Which of the following is a major source of contamination to US drinking water?
 - a) Leaking underground storage tanks.
 - b) Drips from automobiles.
 - c) Storm run off.
 - d) Overfilled lawn mowers.
- 2. If an owner or operator suspects an underground or surface petroleum release from a tank or piping, they must:
 - a) do nothing. Unless you can actually see fuel.
 - b) notify their third party inspector.
 - c) call 911.
 - d) call DEQ within 24 hours.
- 3. Suspected releases are situations that may be a leak from a tank or piping and include seeing or smelling petroleum in or on the ground or nearby water.
 - a) True
 - b) False
- 4. Suspected releases are situations that may be a leak from a tank or piping and include failing results from tank or piping monitoring equipment.
 - a) True
 - b) False
- 5. Suspected releases are situations that may be a leak from a tank or piping and include sudden or unexplained loss of product in the tank.
 - a) True
 - b) False
- 6. Suspected releases are situations that may be a leak from the tank or piping and include water or product found in a tank interstice.
 - a) True
 - b) False
- 7. The Class C operator is the on-site individual who is responsible at any given time for taking emergency action in the event of ______.
 - a) A release
 - b) Equipment alarm.
 - c) Equipment failure.
 - d) All of the above.

- 8. The first thing in response to an emergency is:
 - a) shut off the source of fuel.
 - b) contain the fuel
 - c) call 911 or its local equivalent
 - d) get people away and keep others out
- 9. Class C Operator Training must teach how to take the emergency action at:
 - a) no particular site.
 - b) any facility in Montana.
 - c) any facility one could reasonably be asked to manage.
 - d) that specific facility the Class C operator is responsible for.
- 10. Class C Operator Training must teach facility-specific protocols on how leak detection and overfill alarms should be handled.
 - a) True
 - b) False
- 11. The Class A or B Operator must ensure that at least one trained Class A, B or C operator is on site whenever the facility is manned.
 - a) True
 - b) False

Quiz Section: System Layout

12. Good tank management means having an understanding of:

- a) UST basics, functions and concerns.
- b) fires, leaks and spills.
- c) fines, site closure and jail time
- 13. UST systems do more than store fuel. They also
 - a) Receive
 - b) Monitor
 - c) Dispense
 - d) All of the above
- 14. Fiberglass and clad steel tanks require additional corrosion protection.
 - a) True
 - b) False

- 15. Product piping is composed of the following except:
 - a) Steel
 - b) Concrete
 - c) Fiberglass
 - d) Plastic
- 16. Flex connectors are flexible metallic product piping and require corrosion protection if they are in contact with the soil.
 - a) True
 - b) False
- 17. Containment sumps are enclosed compartments with sidewalls and bottoms that do all of the following EXCEPT:
 - a) protect certain components from contact with the soil.
 - b) prevent leaks from entering the environment.
 - c) provide access from aboveground.
 - d) keep the piping from leaking.
- 18. Metallic vents and tank risers must be protected from corrosion by isolation from the soil or by cathodic protection.
 - a) True
 - b) False
- 19. Underground piping containing product attached to an aboveground storage tank (AST) is regulated as UST piping.
 - a) True
 - b) False

20. All pressurized product lines must have a ______.

- a) shear valve.
- b) breakaway coupling.
- c) overfill alarm.
- d) check valve.
- 21. Vents allow your tanks to
 - a) remain vapor tight.
 - b) breathe.
 - c) regulate tank ullage.
 - d) accept fuel during a delivery.

- 22. Vent stacks must terminate _____ feet above a roof, away from windows and natural vapor traps and at least _____ feet from the ground.
 - a) 1,20
 - b) 3, 3
 - c) 10, 2
 - d) 3, 12

23. You must maintain ______ on portions of your vent line that are in contact with the ground.

- a) corrosion protection
- b) leak detection
- c) spill protection
- d) vapor lock loss

24. Flex connectors can be isolated from the soil by watertight boots or contained entirely within a sump. If they are not, _____ must be applied.

- a) Leak Detection
- b) Cathodic Protection
- c) Spill Prevention
- d) Complete Removal

25. To work properly, sumps as a component of interstitial piping MUST be

- a) made of metal
- b) liquid tight.
- c) hydrostatically tested every year.
- d) inspected daily.

26. Fuel in your sumps is a suspected release and must be reported to DEQ.

- a) True
- b) False
- 27. Many sumps degrade when they are in contact with petroleum product for an extended period of time.
 - a) True
 - b) False
- 28. Underground piping attached to ASTs:
 - a) must have leak detection and corrosion protection
 - b) Must have corrosion protection.
 - c) Must have leak detection only.
 - d) Is not subject to corrosion protection rules.

Quiz Section: Spill and Overfill

- 29. Spill protection devices are required on:
 - a) Aboveground storage tanks.
 - b) UST's receiving more than 25 gallons of product at a time.
 - c) All tanks
 - d) Only diesel tanks.
- 30. The purpose of a spill bucket is to
 - a) stop an underground tank from overfilling.
 - b) catch small spills that happen during a delivery.
 - c) activate the overfill alarm.
 - d) Slow down the flow of fuel if the tank is about to overfill.
- 31. Spill buckets must be ______ or they don't work.
 - a) liquid tight.
 - b) clean and dry
 - c) new and shiny
 - d) periodically vacuumed out
- 32. _____in your spill buckets will degrade them.
 - a) Fuel
 - b) Water
 - c) Debris
- 33. Overfills are mostly prevented by one of three allowable methods:
 - a) Ball float vent valves, Automatic shut-off devices (flapper valves), and Overfill alarms
 - b) Ball float vent valves, Automatic shut-off devices (flapper valves), and Emergency shut off switches.
 - c) Ball float vent valves, Shear valves, and Overfill alarms
 - d) Ball Float Vent Automatic shut-off devices (flapper valves) and fill adapters
- 34. Human error such as ______, is the most likely cause of overfills.
 - a) ordering too much fuel
 - b) filling the wrong tank
 - c) disabling overfill equipment
 - d) All of the above.

- 35. Spill buckets are installed once and never need to be replaced.
 - a) True
 - b) False
- 36. What does an automatic shut off device do?
 - a) Stops the flow of product during delivery
 - b) Slows down the flow of product during delivery
 - c) Sounds an alarm
 - d) None of these
- 37. The automatic shut off device is set to activate at _____ capacity.
 - a) 85%
 - b) 90%
 - c) 95%
 - d) 100%
- 38. How does the driver know the flapper valve has tripped?
 - a) Fuel is gushing out the vent.
 - b) Delivery hose jumps
 - c) Customers Complain
 - d) The delivery slows down.
- 39. Ball float vent valves are installed where?
 - a) Inside the fill pipe
 - b) Where the vent line exits the tank
 - c) In the tank top sump
 - d) In a trap under the dispenser

40. Don't use ball float vent valves if your delivery is _____

- a) Suction
- b) gravity
- c) static
- d) pressurized
- 41. Don't use ball float vent valves on:
 - a) pressurized piping with a line leak detector.
 - b) vent risers.
 - c) suction piping systems.
 - d) cathodic protection systems.

- 42. High level overfill alarms don't stop fuel from flowing but they do alert the driver that an overfill incident is about to occur.
 - a) True
 - b) False
- 43. At a minimum overfill alarms must be set to go off when the liquid level in the tank reaches _____ capacity.
 - a) 90%
 - b) 95%
 - c) 99%
 - d) 101%

44. When the overfill alarm goes off, it's up to the ______ to know how to respond.

- a) customer
- b) delivery driver
- c) clerk
- d) tank

Quiz Section: Corrosion Protection

- 45. There are two types of cathodic protection:
 - a) galvanic (or sacrificial) and impressed current.
 - b) impressed current and stray current.
 - c) galvanic (or sacrificial) and electroplating.
 - d) impressed current and electroplating.
- 46. Using approved non-metal components eliminates the need for cathodic protection.
 - a) True
 - b) False
- 47. _____metal from the soil eliminates the need for cathodic protection.
 - a) Isolating
 - b) Bonding
- 48. Galvanic cathodic protection can protect ______amounts of metal in contact with the soil.
 - a) small
 - b) large

- 49. If you use impressed current corrosion protection, you must check your rectifier at least every _____days to make sure it is operating correctly and you must document that you did it.
 - a) 30
 - b) 60
 - c) 90
 - d) 120
- 50. Impressed current cathodic protection can protect ______ amounts of metal in contact with the soil.
 - a) small
 - b) large
- 51. A ______ must test your cathodic protection system every
 - a) qualified corrosion tester, every three years.
 - b) qualified corrosion tester, every year
 - c) certified installer, every three years
 - d) certified installer, every year.
- 52. Galvanic cathodic protection systems will sacrifice the ______ to help protect metal in contact with the soil.
 - a) Tank
 - b) Piping
 - c) Anode
 - d) Vent stacks
- 53. For Impressed Current cathodic protection you must keep documentation of the _____ most recent rectifier check(s) on file (DEQ recommends keeping all readings).
 - a) one
 - b) two
 - c) three
 - d) four
- 54. Impressed current charges the metal with ______ electricity.
 - a) Alternating Current
 - b) Direct Current
 - c) superconducting
 - d) volts

- 55. You should check the amperage of the impressed current rectifier and compare it to recent months' readings. If the readings change significantly, you should:
 - a) have a corrosion technician look at your system.
 - b) file a suspected release report with DEQ.
 - c) call the emergency response team.
 - d) file and incident and close the case.

56. Repairs to the cathodic protection system must be designed by a _____ and installed with a permit from DEQ.

- a) Corrosion expert
- b) Civil engineer
- c) Geologist
- d) Tank tester

Quiz Section: Leak Detection

57. You must conduct leak detection on a regular basis for ______.

- a) tanks
- b) piping
- c) delivery trucks
- d) tanks and piping
- 58. Which method of leak detection you can utilize is dependent on the size, use, age and the type of your tank.
 - a) True
 - b) False
- 59. Most petroleum releases come from the:
 - a) tanks.
 - b) dispensers.
 - c) vent pipes.
 - d) piping.
- 60. In suction piping, product is moved through the pipe by drawing it at ______ atmospheric pressure.
 - a) less than
 - b) more than
- 61. There are two categories of suction piping:
 - a) safe suction and U.S. suction
 - b) European suction and gravity suction
 - c) U.S. suction and gravity suction
 - d) safe suction and European suction

- 62. If safe suction loses it's prime, you should conduct a precision line tightness test.
 - a) True
 - b) False
- 63. Safe suction is characterized by the fact that:
 - a) The only check valve in the line is near the dispenser.
 - b) The piping all slopes back to the tank.
 - c) The pipe operates at less than atmospheric pressure.
 - d) All of the above.
- 64. With U.S. suction piping you must have a precision tightness test conducted every ______ or apply an approved monthly leak detection method.
 - a) year
 - b) two years
 - c) three years
 - d) six months
- 65. Pressurized piping must have two forms of leak detection available: One continuously for ______ leaks and one periodically for ______leaks.
 - a) large, small
 - b) small, large

66. For pressurized piping leak detection, options include ______line tightness tests or an approved monthly monitoring method.

- a) weekly
- b) monthly
- c) annual
- d) bi-annual
- 67. What is the minimum test frequency required if you use an ATG for leak detection?
 - a) daily
 - b) every other day
 - c) weekly
 - d) monthly
- 68. If your leak detection console notifies you there is a problem (in "alarmed" state) you must investigate within _____ hours.
 - a) 12
 - b) 24
 - c) 36
 - d) 48

- 69. What leak rate should your automatic tank gauge be programmed to test for?
 - a) One tenths of a gallon per hour
 - b) Two tenths of a gallon per hour
 - c) Three gallons per hour
 - d) Ten gallons per day
- 70. Unless you meet special requirements for a small tank, state law requires that you test your tanks for leaks at least monthly and keep a record of a valid, passing tests for each month over the last ______ months.
 - a) 12
 - b) 24
 - c) 36
 - d) 48
- 71. Test results should only show passing results. Any invalid or failed test results must be promptly ______ or retested.
 - a) investigated
 - b) ignored
 - c) filed
 - d) discarded
- 72. All pressurized lines must have catastrophic leak detection and must be able to find a large leak within _____.
 - a) a second
 - b) a minute
 - c) an hour
 - d) a day
- 73. Mechanical line leak detectors look for what sized leak in a pressurized pipe?
 - a) 1 gallon per minute
 - b) .2 gallons per hour
 - c) 3 gallons per hour
 - d) 5 gallons per hour
- 74. A sign that a mechanical line leak detector might have found a leak includes:
 - a) high level alarm.
 - b) slow flow at the dispenser.
 - c) a warning light.
 - d) an overfill alarm.

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- 75. A line leak detector must be tested for functionality according to the manufacturer's recommendations or at least:
 - a) weekly.
 - b) annually.
 - c) every 3 years.
 - d) never.

76. If the electronic line leak detector (ELLD) fails the annual functionality test, it should be:

- a) replaced.
- b) retested.
- c) ignored.
- d) removed and the opening plugged.
- 77. An ELLD used to pass the monthly leak requirement must test at _____ gallons per hour or better.
 - a) .2
 - b) .3
 - c) .5
 - d) 3

78. You must keep the ELLD leak test records of the last ______.

- a) 3 months
- b) 6 months
- c) 12 months
- d) 2 years
- 79. When conducting a line tightness test, each product line must pass a leak test of _____ gallons per hour.
 - a) .1
 - b) .2
 - c) .3
 - d) 3

80. What do you do if you fail a line tightness test?

- a) File the report away and test again next month.
- b) Investigate and determine, within 24 hours, if the leak result is conclusive.
- c) Leave it alone, it's probably a false alarm.
- d) Call 911 and shut down the site.

- 81. How do you perform interstitial monitoring?
 - a) By checking to see if the leak rate exceeds .2 gallons per hour.
 - b) By noticing slow flow at the dispenser.
 - c) By smelling for petroleum vapors in the groundwater well.
 - d) By checking the low point of the interstitial space for liquid.
- 82. Interstitial monitoring looks for leaks in what kind of piping?
 - a) Single Walled
 - b) Vents
 - c) Double Walled
 - d) Fills
- 83. Water in your interstitial monitoring containment sumps creates what problem:
 - a) No problem. Sumps are supposed to contain water.
 - b) Interrupts deliveries.
 - c) Reduces the need for monthly testing.
 - d) False release alarms and rusty part.
- 84. The SIR leak detection method is approved for
 - a) piping only
 - b) tanks only.
 - c) tanks and piping.
 - d) tanks and pressurized piping only.
- 85. If you are conducting SIR for your leak detection method, the operator gathers the data and sends it to the ______for analysis.
 - a) DEQ
 - b) SIR Vendor
 - c) tank gauge installer
 - d) supervisor
- 86. INCONCLUSIVE and FAIL results are suspected releases and must be reported to within 24 hours.
 - a) DEQ
 - b) SIR Vendor
 - c) tank installer
 - d) 911

- 87. Groundwater monitoring can be ______ or ______ or ______
 - a) Electric or Mechanical
 - b) Manual or Automatic
 - c) Pressure or Suction
 - d) Pressure only

88. If you use Vapor monitoring for leak detection, the sensors must be ______ the product it's trying to detect.

- a) close to
- b) vaguely similar to
- c) approved for
- d) near
- 89. In manual tank gauging you have to take your measurement to the nearest?
 - a) 1/16"
 - b) 1/8"
 - c) 1/4"
 - d) 1/2"
- 90. If a tank is under _____ years old and less than 2000 gallons, you can use manual tank gauging as a monthly leak detection method.
 - a) you can never use manual tank gauging as a monthly leak detection method
 - b) 2
 - c) 5
 - d) 10

When you have finished the quiz, please mail your <u>Answer Sheet and Class B operator Training</u> <u>Information form</u> to:

Department of Environmental Quality UST Section 1520 East Sixth Ave. PO Box 200901 Helena, MT 59620-0901

Questions About Completing The Quiz?

If you want more information or need help completing the Class B Operator Training quiz you can:

- Contact your UST contractor, vendor of your equipment, environmental compliance consultants, or the manufacturer of your UST equipment. Look through your records for information on how to contact them.
- Contact the Department of Environmental Quality. We may be able to help you identify equipment or sources of information about your UST equipment.



UST Section 1520 East Sixth Ave. Helena, MT 59620-0901 (406) 444-5300 ustprogram@mt.gov

 Read information from other resources such as state or EPA publications or Internet sites. You may also want to use industry Internet sites. See appendix A in the <u>Class B Operator Training Workbook</u> for these resources.



1520 East Sixth Ave. PO Box 200901 Helena MT 59620-0901