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Fats, Oils and Grease (FOG) CEU Training Course \$50.00 48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$50.00

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List number of hours worked on assignment must match State requirement.		
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You can obtain a printed version of the course manual from TLC for an additional \$59.95 plus shipping charges.

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I affirm that I personally completed the entire text of the course. I also affirm that I completed the exam without assistance from any outside source. I understand that it is my responsibility to file or maintain my certificate of completion as required by the state or by the designation organization.

Grading Information

In order to maintain the integrity of our courses we do not distribute test scores, percentages or questions missed. Our exams are based upon pass/fail criteria with the benchmark for successful completion set at 70%. Once you pass the exam, your record will reflect a successful completion and a certificate will be issued to you.

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We will stop mailing the certificate of completion so we need either your fax number or e-mail address. We will e-mail the certificate to you, if no e-mail address; we will fax it to you.

FOG Answer Key

N	ame		Phone#		
Y	ou can also type your own	answer key			
<u>N</u>	You are solely responsible that this course is accepted for credit by your State. No refunds. Did you check with your State agency to ensure this course is accepted for credit?				
D	<i>Method of Cour</i> o not solely depend o	rse acceptance con n TLC's Approval			
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D	id you receive the app	proval number. if a	oplicable?		
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Y	ou are responsible to er	sure that TLC recei	ves the Assignment	t and Registration Key.	
P	lease call us to ensure t	hat we received it.			
	You can also fill	this assignment out	electronically in Ac	lobe Acrobat DC	
	Please circ	le, underline, bold	or X only one cor	rect answer	
1.	ABCDEF	15. A B C D	E F 29	9. ABCDEF	
2.	ABCDEF	16. A B C D	E F 30	D. ABCDEF	
3.	ABCDEF	17. ABCD	E F 3	1. ABCDEF	
4.	ABCDEF	18. A B C D	E F 32	2. ABCDEF	
5.	ABCDEF	19. A B C D	E F 33	B. ABCDEF	
6.	ABCDEF	20. A B C D	E F 34	4. ABCDEF	
7.	ABCDEF	21. A B C D	E F 35	5. ABCDEF	
8.	ABCDEF	22. A B C D	E F 36	6. ABCDEF	
9.	ABCDEF	23. A B C D	E F 37	7. ABCDEF	
10.	ABCDEF	24. A B C D	E F 38	3. ABCDEF	
11.	ABCDEF	25. A B C D	E F 39	9. ABCDEF	
12.	ABCDEF	26. A B C D	E F 40	O. ABCDEF	
13.	ABCDEF	27. A B C D	E F 4	1. ABCDEF	
14.	ABCDEF	28. A B C D	E F 42	2. ABCDEF	

43.	ABCDEF	53.	A B (C D	Ε	F	63.	Α	В	С	D	Ε	F
44.	ABCDEF	54.	АВО	C D	Ε	F	64.	Α	В	С	D	Ε	F
45.	ABCDEF	55.	A B (C D	Ε	F	65.	Α	В	С	D	Ε	F
46.	ABCDEF	56.	A B (C D	Ε	F	66.	Α	В	С	D	Ε	F
47.	ABCDEF	57.	A B (C D	Ε	F	67.	Α	В	С	D	Ε	F
48.	ABCDEF	58.	A B (C D	Ε	F	68.	Α	В	С	D	Ε	F
49.	ABCDEF	59.	A B (C D	Ε	F	69.	Α	В	С	D	Ε	F
50.	ABCDEF	60.	A B (C D	Ε	F	70.	Α	В	С	D	Ε	F
51.	ABCDEF	61.	A B (C D	Ε	F							
52.	ABCDEF	62.	A B (C D	Ε	F							

This course contains general EPA's CWA federal rule requirements. Please be aware that each state implements wastewater/safety/environmental /building regulations that may be more stringent than EPA's regulations. Check with your state environmental/health agency for more information. These rules change frequently and are often difficult to interpret and follow. Be careful to be fully in compliance and do not follow this course for proper compliance.

Please fax the answer key to TLC (928) 272-0747

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FOGCEU TRAINING COURSE

CUSTOMER SERVICE RESPONSE CARD

NΑ	ME:			_			
E-l	MAIL				_ PHON	IE	
	EASE COMP						NUMBER OF THE
1.	Please rate the Very Easy	ne difficult	y of your o	course. 3	4	5	Very Difficult
2.	Please rate the Very Easy	ne difficult	y of the te 1 2	esting pro	ocess. 4	5	Very Difficult
3.							tual field or work. Very Different
4.	How did you	hear abou	t this Cou	ırse?			
Hc	ow about the p	rice of the	course?				
Pc	or Fair	Ave	erage	_ Good_	Gr	eat	
Hc	ow was your cu	ıstomer se	ervice?				
Pc	or Fair	Avera	ge (Good	Gre	at	
An	y other conce	rns or com	ıments.				

FOG CEU Training Course Assignment

The Assignment (Exam) is also available in Word on the Internet for your Convenience, please visit www.ABCTLC.com and download the assignment and e- mail it back to TLC.

You will have 90 days from the start of this course to complete in order to receive your Professional Development Hours (**PDHs**) or Continuing Education Unit (**CEU**). A score of 70 % is necessary to pass this course. We prefer if this exam is proctored. No intentional trick questions. If you should need any assistance, please email all concerns and the completed manual to info@tlch2o.com.

We would prefer that you utilize the enclosed answer sheet in the front, but if you are unable to do so, type out your own answer key. Please include your name and address on your Answer Key and make copy for yourself. You can e-mail or fax your Answer Key along with the Registration Form to TLC. (S) Means answer may be plural or singular. Multiple Choice Section, One answer per question and please use the answer key.

answer per question and pie	ase use the answer key.
1. Commercial food preparati method that FOG gets into ousubstances down their drains.	ease Discharges from Food Service Establishments on establishments with inadequate grease controls is the primary r sewer collection system mainly frompouring the D. Honey dippers E. Residential customers F. None of the Above
businesses are caused because and eventually blo A. Sewer system B. POTW's requirement(s)	ows on streets, properties and even in customers' homes and/or e of improper disposal of fats, oils and grease, FOG builds up in the ck collection pipes and sewer lines, resulting in D. Least management practices (LMPs) E. Food Service Establishments (FSEs) F. None of the Above
environment negatively.	oill be contaminated due to and will also impact the DTW Commercial FOG Program(s) anagement Practices (MPs) ne of the Above
source of fats, oil and grease (F	f grease used in cooking,are a significant
developed to assist restaurants A. CSO/SSO B. POTWs	g and disposal of their FOG are generally and other FSEs with instruction and compliance. D. Customer service E. Capacity, Management, Operations, and Maintenance or F. None of the Above

	nt of FOG that goes down their drains. This will minimize bly with the POTW's requirements.
•	owing terms can handle properly disposed wastes, but to be properly maintained, from the drain to the treatment
A. Vactor D. Most B. POTW's requirement(s) E. Hone	management practices (MMPs) by pumpers of the Above
the sewer system cannot handle, and ther A. Liquid D. Grea B. Grinder pump extract E. Solid	se
because repeated repairs are disruptive to by commercial establishments is required A. Law D. Best B. POTW's recommendations E. Food	management advice (BMAs)
Environmental problem with FOG sewer 10. Grease balls are formed by solidifies. The various sizes of these great cantaloupes and must be removed period A. FOG D. Solids B. Sewer backup(s) E. Liquid C. Overflow(s) F. None of the	that enters the sewer system eventually ease balls can range in size from marbles to the size of ically.
plants that in turn lead to higher custome or treat these substances effectively. A. Customer(s) complaints B. POTW's recommendations	maintenance of the collection systems and/or treatment rates are because the sewer system is unable to handle D. Least management practices (LMPs) E. Food Service Establishments (FSEs) D. None of the Above
property. A. Infiltration D. Jump joints	dollars for the repair or replacement of their damaged
B. Sewer backup(s) E. Hydraulic un C. Overflow(s) F. None of the	
(S) means the answer may be plural or sir	ngular in nature.

Controlling FOG discharges 13. According to the text, FOG wastes are generated at as byproducts from food preparation activities.
A. CSO/SSO D. Customer service B. POTWs E. Capacity, Management, Operations, and Maintenance (CMOM) C. FSEs F. None of the Above
 14. What are the generally two FOG captured on-site broad categories? A. Yellow grease and grease trap waste B. White grease and grease trap waste C. Overflow(s) and Interflow D. Soft and Hard E. Threat and Non-threat F. None of the Above
15. Food service establishment(s) collect and separate grease and from this procedure, is derived from used cooking oil and waste greases. A. Interceptor grease D. Tallow B. Interceptor/collector device(s) E. Yellow grease C. Inflow F. None of the Above
16. Food service establishment(s) or FSE can adopt a variety of best management practices or install interceptor/collector devices to control and capture the before discharge to the POTW collection system. A. BMPs D. Interceptor/collector device(s) B. Grease interceptor and trap E. FOG material C. FOG F. None of the Above
17. The POTW collection system(s) will require that certain food service establishments install interceptor/collector devices in order to accumulate grease on-site and prevent it from entering the? A. Kitchen drain(s) D. POTW collection system(s) B. Interceptor/collector device(s) E. Food service establishment(s) or FSE F. None of the Above
Keeping Fats, Oils, and Grease out of the Sewer System 18. Manholes can overflow into parks, yards, streets, and storm drains, allowing FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public-health hazard and is an EPA violation. FOG discharged into septic systems and drain fields can cause malfunctions, resulting in more frequent tank pump-outs and other expenses. A. True B. False
19. Which of the following terms will back up into homes and businesses, resulting in high costs for cleanup and restoration? A. Dye D. Smoke B. Interceptor/collector device(s) E. Untreated wastewater C. Camera F. None of the Above
POTWs control methods for FOG discharges from FSEs 20. There are many different devices, methods and procedures i.e., proper design, installation, and maintenance procedures are critical for these devices to? A. Control and capture the Yard waste D. Petroleum-based oil(s) E. Your negligence C. Control and capture the Water F. None of the Above

21. FOG must be able to cool and separate in a non-turbulent environment, therefore. must be designed and sized appropriately.
A. Kitchen drain(s) D. POTW collection system(s) E. Food service establishment(s) or FSE
B. Interceptor/collector device(s) E. Food service establishment(s) or FSE
C. BMPs F. None of the Above
22. Grease interceptor/ collector devices shall be serviced at regular intervals and
must be diligent in providing proper maintenance and records.
A. BMPs D. Honey Pumpers B. Service crews E. FSE
B. Service crews E. FSE
C. Employees F. None of the Above
Best Management Practices (BMPs)
23. The amount of FOG a facility generates as well as any best management practices (BMPs)
that the establishment implements to reduce the FOG discharged into its sanitary sewer system
is dependent upon the required maintenance frequency for interceptor/collector devices depends
upon. A. True B. False
A. True B. Taise
24. Because of required grease interceptor and trap maintenance frequency, an establishment that
implements BMPs will realize abenefit.
A. Financial D. Interceptor/collector device(s)
B. Grease interceptor and trapC. FOGE. Odor reductionF. None of the Above
C. FOG F. None of the Above
Residential and Commercial Guidelines
25. The major concern for is the improper disposal of fats, oil and grease
(FOG) found in food ingredients such as meat, cooking oil, shortening, butter, margarine, baked
goods, sauces and dairy products.
A. CSU/SSU D. Customer service
A. CSO/SSO D. Customer service B. BMPs E. Capacity, Management, Operations, and Maintenance (CMOM) F. None of the Above
C. FOTW'S SewerS F. None of the Above
26. To remediate this problem, control authorities have developed an outreach program aimed at
eliminating FOG from the sewer system in sewer lines has many harmful and
costly effects.
A. Yard waste D. Petroleum-based oil(s)
B. FOG buildup E. Your negligence
C. Water F. None of the Above
27. Which of the following terms into homes create a health hazard as well as an unpleasant mess
that can cost hundreds and sometimes thousands of dollars to clean up?
A. Sewage backflow D. Sewer backups
B. Trash and debris E. Health hazard(s)
C. Soap and oil residue(s) F. None of the Above

certain parts of the POTW,can enter storm drains and flow directly into water bodies
and onto beaches creating problems.
A. Sewage backups D. FOG B. Trash and debris E. Health hazard(s)
B. Trash and debris E. Health hazard(s)
C. Soap and oil residue(s) F. None of the Above
29. Which of the following terms, and petroleum-based oils can also cause sewer-related problems?
A. Yard waste D. Cooking oils
B. Solids buildup E. Your negligence
C. Water F. None of the Above
30. Storm sewers need to be kept clean and car washing can often results in entering the storm sewers.
A. Sewage backups D. FOG B. Trash and debris E. Health hazard(s) C. Soap and oil residue(s) F. None of the Above
C. Soon and all regidue(s) C. Soon and all regidue(s) C. Mone of the Above
C. Soap and oil residue(s) F. None of the Above
31 enters into storm sewers from run-off from your sprinkler, watering hose, or from
the rain can carry yard waste.
A. Fertilizer D. Petroleum-based oil(s)
B. FOG buildup E. Negligence
C. Water F. None of the Above
32. Littering can cause to clog catch basins and storm drains. A. Sewage backups D. FOG B. Trash and debris E. Health hazard(s) C. Soap and oil residue(s) F. None of the Above
A. Sewage backups D. FOG
B. Trash and debris E. Health hazard(s)
C. Soap and oil residue(s) F. None of the Above
33. one million gallons of water can be easily contaminated by simply poring down
a storm drain could contaminate up to
A. A gallon of oil D. Liquids
B. Dye E. Smoke
A. A gallon of oil D. Liquids B. Dye E. Smoke C. Water F. None of the Above
Using best management practices can:
34. Expensive bills for plumbing and and losing revenue to emergency
shutdowns caused by sewage backups and expensive bills for plumbing and Property repairs can
be lessened by proper sewer maintenance and compliance.
A. Sewage backups D. FOG
B. Trash and debris E. Health hazard(s)
C. Property repairs F. None of the Above
35. Which of the following terms is the primary cause of sewer problems; this in turn causes the
likelihood of lawsuits by nearby businesses over sewer problems?
A. Backup D. Crime
B. Violation(s) E. Negligence
b. Violation(5) E. Negligence

36. Workers or the public can be exposed to Reduce exposure, thus limiting some lawsuits. A. Backup D. Crime B. FOG buildup E. Negligence C. Raw sewage F. None of the Above	during a problem, it is best to
 37. It is best that the customer increases the number of times you A. Pipes D. Grease interceptors or traps B. FOG buildup E. Sewer C. Self F. None of the Above 	u have to pump and clean their?
38. In order to lessen the likelihood of surcharges from your local for repairs to sewer pipes attributable to customer's? A. Sewage backups D. FOG B. Trash and debris E. Health hazard(s) C. Soap and oil residue(s) F. None of the Above	al sewer authority, or chargebacks
 pH Section 39. Since pH is a logarithmic scale, a difference of one pH unit is difference in hydrogen ion concentration A. 1 D. 10 B. 2 E. 100 C. 5 F. None of the Above 	s equivalent to a
40. According to the manual, this key water measurement is use of water and wastewater treatment processes. A. Acid D. Chemical ion B. Alkalinity E. Hydrogen bond formation C. pH F. None of the Above	ed in the interpretation and control
41. What is the term associated with a charged species, an atogained one or more electrons. A. A proton D. An electron B. Ion E. A cation C. Anti-matter F. None of the Above	om or a molecule, that has lost or
42. What is a substance that has the ability to reduce other substance? A. Protons B. An electron donor C. Anti-matter D. Electrons E. Cations F. None of the Above	tances and is said to be reductive
43. In chemistry, pH is a measure of the acidity or basicity of an pH less than 7 are said to be acidic and solutions with a pH green Pure water has a pH very close to? A. 5 D. 7.7 B. 6 E. 7.5 C. 7 F. None of the Above	•

	which of the following parameter/methods/measurements determine on cell with transference by measuring the potential difference. D. pH measurement(s) E. Measurement of pH F. None of the Above
	in determining a stream's ability to neutralize acidic pollution from surement can be one of the best measures of the sensitivity of the
, a _H +, in a solut	D. Brønsted–Lowry acid–base theory E. Acid-base behavior
47. Commercial standard buff correction factor to be applied for A. 4 °C D. 10 °C B. 25 °C E. 70 °F C. 39 °F F. None of the	fer solutions usually comes with information about value and a r what temperatures? e Above
	D. Excess of Ion concentrationsE. A set of non-linear equations
 49. Alkalinity is able to neutralized in an aqueous solution. A. Acid D. pH measures B. Base E. Bond formation C. pH F. None of the 	re and is measured in a quantitative capacity rement(s) ation e Above
values should be done to the?	
Industrial Uses (Fats, Oils, and Proper Disposal Methods: Ways in which a customer can doing the following:	d Grease) reduce the amounts of FOG that enters the sewer system is by
months they should be pumped of A. Intercentor grease	· ·

52. It is best tointo your dishwasher or sink. A. An approved method	from dishes and pans into a garbage bag before placing them D. Wipe small amounts of cooking oil
B. Scrape greaseC. First freeze the grease	E. Scrape grease and food residue F. None of the Above
53. Only dispose of fat and grea	ase in an approved container or by?
A. An approved method B. Scrape grease	D. Wipe small amounts of cooking oil F. Store oil in the original container
C. First freeze the grease	D. Wipe small amounts of cooking oilE. Store oil in the original containerF. None of the Above
54o A. Pouring oil(s)	r motor oil at a recycling center.
B. Pouring on(s) B. Pouring household grease	F. Allow grease to cool
C. Mix oil(s)	F. None of the Above
55. It is best to throw the harden	ned oil away on trash day by or oil.
B. Scrape grease	D. Wipe small amounts of cooking oil E. Store oil in the original container
C. First freeze the grease	F. None of the Above
56. To solidify the oil in order t sand	to pick up with unscented kitty litter, sawdust or
A. Pouring oil(s)B. Pouring household grease	D. Recycle used cooking
B. Pouring household grease	E. Allow grease to cool
C. Mix oil(s)	F. None of the Above
the trash.	, such as meat drippings, and throw the paper towel in
A. An approved method	D. Wipe small amounts of cooking oil
C. First freeze the grease	E. Store oil in the original container E. None of the Above
_	
"No Grease" signs around sinks	om dumping fry grease and other fat products down the drain, install to remind employees.
A. Pouring oil(s)	D. Recycle used cooking
B. Pouring household grease	E. Allow grease to cool
C. Mix oil(s)	F. None of the Above
best to?	or foreign materials carefully try to pour the oil poured back and it is
A. Use an approved method	D. Wipe small amounts of cooking oil with paper towel
B. Scrape greaseC. Freeze the grease	E. Store oil in the original container F. None of the Above
Methods that should be avoid	
60. This is one of the major	contributors to sewer stoppages and is easily preventable is posals or other drains.
A. Pouring oil(s)	D. Pouring household grease into sinks
B. Pouring household grease	
C. Mix oil(s)	F. None of the Above
	1 7

Ways to Recycle FOG Rendering FOG

61. Many companies will provide storage barrels and free pick-up service and most _____ can be used as raw materials in the rendering industry, which converts them into animal food, cosmetics, soap, and other products.

A. Biodiesel D. SSOs

B. FOG E. Liquid fats and solid meat products

C. FOG discharge(s) F. None of the Above

Converting FOG to Biodiesel

62. Which of the following terms are collected and converted by a local manufacturer into environmentally friendly biodiesel fuel?

A. CSO/SSO D. Infiltration
B. POTWs gases E. Outfall solids
C. FOG F. None of the Above

Inspection Checklists

63. Responding to _____ should be part of a comprehensive, dynamic, utility specific CMOM program that ensures better managing, operating and maintaining sanitary sewer collection systems, investigating capacity constrained areas of the collection system.

A. CSO/SSO D. SSOs

B. Jumped JointC. FOG discharge(s)E. Invert problemsF. None of the Above

64. Which of the following terms problems need to part of the ensuring the proper operation for POTWs, Controlling FOG discharges from FSEs is an essential element in controlling this problem?

A. CSOs and SSOs D. POTW's requirements

B. POTWs E. Capacity, Management, Operations, and Maintenance (CMOM)

C. SSO's F. None of the Above

65. It is essential that you as a wastewater professional control FOG discharges and assit POTWs prevent blockages that create or impact ______, which cause public health and water quality problems.

A. CSO/SSO D. SSOs

B. Jumped JointC. FOG discharge(s)E. Invert problemsF. None of the Above

Treatment Balance and the Effects of Undesirable Solids

66. Proper POTW operation. When a plant is properly maintained these bacteria or bugs eat the dissolved organics in the water, thus adding BOD, Ammonia, Nitrates, and Phosphorus. For any wastewater treatment plant to operate properly, the operator has to maintain a skillfully balanced mixture of microorganisms which contact and digest the inorganics in the wastewater, and bacteria then grows on this media to treat the wastewater.

A. True B. False

67. The EPA has found that SSOs caused by poor sewer collection system management pose a substantial health and environmental challenge. The response to this challenge varies considerably from state to state. Many municipalities have asked for national consistency in the way permits are considered for wastewater discharges, including SSOs, and in enforcement of the law prohibiting unpermitted discharges.

A. True B. False

68. Certain compounds and undesirable solids, like grease and grass clippings, can disturb this delicate balance and necessary process at the wastewater treatment facility. There are compounds and mixtures that should always be introduced into a sanitary sewer system. These compatible compounds include but are limited to: cleaning solvents, grease (both household and commercial), oils (both household and commercial), pesticides, herbicides, antifreeze and other automotive products.

A. True B. False

69. The EPA has found that SSOs caused by poor sewer collection system management pose a substantial health and environmental challenge. The response to this challenge varies considerably from state to state. Many municipalities have asked for national consistency in the way permits are considered for wastewater discharges, including SSOs, and in enforcement of the law prohibiting unpermitted discharges.

A. True B. False

70. If an SSO occurs, sanitary sewer facilities will be required to immediately notify the NPDES permit authority, appropriate health agencies, state authorities, drinking water suppliers, and, if necessary, the general public in the risk area. This rule will also require an annual report of all overflows, including minor SSOs such as building backups. Facilities must post locations of recurrent SSOs and let the public know that the annual report is available to them.

A. True B. False

(S) means the answer may be plural or singular in nature. All of the answers must be in accordance to the Course Manual.

You are finished with the assignment.

Please fax or email this to us and call an hour later to ensure we've received it.