

## **Final Exam**

## Continuing Education Course #473 Oil and Grease Removal

<ol> <li>What does FOG stand for?</li> <li>a. Food, oil, and grease</li> <li>b. Fat, oil, and grease</li> <li>c. Foodstuff, oil, and grease</li> </ol>
<ul> <li>2. Which is NOT a reason that FOG became problematic in early collection systems?</li> <li>a. Oil based products became increasingly popular</li> <li>b. FOG can harden when it warms</li> <li>c. FOG can harden when it cools</li> </ul>
<ul> <li>3. What is the name of the first device used to contain FOG?</li> <li>a. Grease Trap</li> <li>b. Grease Interceptor</li> <li>c. Oil Water Separator</li> </ul>
<ul> <li>4. What helped raise awareness of the harm of releasing oil waste into natural areas?</li> <li>○ a. Health problems from fatty foods</li> <li>○ b. WWII</li> <li>○ c. Oil spills</li> </ul>
5. What is HEM?  a. Hexane Extractable Material  b. Half Extracted Material  c. Heat Elevated Material
6. What is SGT-HEM?  ○ a. Polar O&G  ○ b. Non-polar O&G  ○ c. Neutral O&G
7. Which industry typically discharges the highest concentration of O&G?  a. Textile  b. Metals Fabrication  c. Laundry Mats
<ul> <li>8. What is another term for a grease trap?</li> <li>a. Gravity grease interceptor</li> <li>b. P-trap</li> <li>c. Hydromechanical grease interceptor</li> </ul>

9. What type of pollutant is O&G?  ○ a. Conventional  ○ b. Priority  ○ c. Nonconventional
10. What is a typical O&G limit in mg/L for indirect discharge?  ○ a. 20 ○ b. 100 ○ c. 500
11. What is the pounds formula?  O a. $lb/d = mg/L * MGD * 8.34$ O b. $lb/d = mg/L * gpm * 8.34$ O c. $lb/d = mg/L * MGD * 4.83$
12. Which is the easiest form of oil to remove?  ○ a. Dissolved ○ b. Emulsified ○ c. Free
<ul> <li>13. What do emulsifiers do?</li> <li>○ a. Separate oil particles</li> <li>○ b. Suspend oil particles</li> <li>○ c. Dissolve oil particles</li> </ul>
<ul> <li>14. Which normally has the smallest molecules?</li> <li>○ a. Dissolved</li> <li>○ b. Emulsified</li> <li>○ c. Free</li> </ul>
<ul> <li>15. Which is the main form of oil targeted by an Oil Skimmer?</li> <li>○ a. Free</li> <li>○ b. Emulsified</li> <li>○ c. Dissolved</li> </ul>
<ul> <li>16. Which is the main form of oil targeted by Adsorption?</li> <li>○ a. Free</li> <li>○ b. Emulsified</li> <li>○ c. Dissolved</li> </ul>
<ul> <li>17. Which is the main form of oil targeted by pH Adjustment?</li> <li>○ a. Free</li> <li>○ b. Emulsified</li> <li>○ c. Dissolved</li> </ul>
<ul> <li>18. Which feature is commonly added to an Oil Water Separator to enhance oil removal?</li> <li>○ a. Bentonite powder</li> <li>○ b. Coalescing media</li> <li>○ c. Recycle pump</li> </ul>
19. Which industry commonly uses an API Separator?

a. Oil refineries
O b. Restaurants
○ c. Food processing
20. Which method is the most common for sizing a gravity grease interceptor?  O a. No. of meals & dishwashers
b. Minimum volume
○ c. 30 minutes at peak flow