Assignment 4

Due on 2020-02-26, 21:59 GMT

Week 1

1. Which of the following compounds cannot be formed by zero-valent iron in permeable reactive barriers?
   - BFR
   - Methane
   - Carbon dioxide
   - None of the above
   - Acceptable answer: A

2. Which of the following groups of contaminants can be remediated effectively by biological treatment?
   - Hydrocarbons (H)
   - Azide (Az)
   - Chloroform (Cl)
   - None of the above
   - Acceptable answer: A

3. Which of the following compounds can be remediated effectively by biological treatment.
   - Aqueous (Az)
   - Chloroform (Cl)
   - None of the above
   - Acceptable answer: B

Week 2

4. A mine containing Zn and Sb was treated with ZVI. The concentration of Zn in the mine water was measured before and after treatment. Before treatment, the concentration of Zn was 10 mg/L. After treatment, the concentration of Zn was 2 mg/L. What was the removal efficiency of Zn? (Round off to one decimal place)
   - Acceptable answer: 80.0%

5. A mine containing Zn and Sb was treated with ZVI. The concentration of Sb in the mine water was measured before and after treatment. Before treatment, the concentration of Sb was 5 mg/L. After treatment, the concentration of Sb was 1 mg/L. What was the removal efficiency of Sb? (Round off to one decimal place)
   - Acceptable answer: 80.0%

Week 3

6. A mine containing Zn and Sb was treated with ZVI. The concentration of Zn in the mine water was measured before and after treatment. Before treatment, the concentration of Zn was 10 mg/L. After treatment, the concentration of Zn was 2 mg/L. What was the removal efficiency of Zn? (Round off to one decimal place)
   - Acceptable answer: 80.0%

7. A mine containing Zn and Sb was treated with ZVI. The concentration of Sb in the mine water was measured before and after treatment. Before treatment, the concentration of Sb was 5 mg/L. After treatment, the concentration of Sb was 1 mg/L. What was the removal efficiency of Sb? (Round off to one decimal place)
   - Acceptable answer: 80.0%

Week 4

8. A mine containing Zn and Sb was treated with ZVI. The concentration of Zn in the mine water was measured before and after treatment. Before treatment, the concentration of Zn was 10 mg/L. After treatment, the concentration of Zn was 2 mg/L. What was the removal efficiency of Zn? (Round off to one decimal place)
   - Acceptable answer: 80.0%

9. A mine containing Zn and Sb was treated with ZVI. The concentration of Sb in the mine water was measured before and after treatment. Before treatment, the concentration of Sb was 5 mg/L. After treatment, the concentration of Sb was 1 mg/L. What was the removal efficiency of Sb? (Round off to one decimal place)
   - Acceptable answer: 80.0%

Week 5

10. A mine containing Zn and Sb was treated with ZVI. The concentration of Zn in the mine water was measured before and after treatment. Before treatment, the concentration of Zn was 10 mg/L. After treatment, the concentration of Zn was 2 mg/L. What was the removal efficiency of Zn? (Round off to one decimal place)
    - Acceptable answer: 80.0%

11. A mine containing Zn and Sb was treated with ZVI. The concentration of Sb in the mine water was measured before and after treatment. Before treatment, the concentration of Sb was 5 mg/L. After treatment, the concentration of Sb was 1 mg/L. What was the removal efficiency of Sb? (Round off to one decimal place)
    - Acceptable answer: 80.0%

Week 6

12. A mine containing Zn and Sb was treated with ZVI. The concentration of Zn in the mine water was measured before and after treatment. Before treatment, the concentration of Zn was 10 mg/L. After treatment, the concentration of Zn was 2 mg/L. What was the removal efficiency of Zn? (Round off to one decimal place)
    - Acceptable answer: 80.0%

13. A mine containing Zn and Sb was treated with ZVI. The concentration of Sb in the mine water was measured before and after treatment. Before treatment, the concentration of Sb was 5 mg/L. After treatment, the concentration of Sb was 1 mg/L. What was the removal efficiency of Sb? (Round off to one decimal place)
    - Acceptable answer: 80.0%