

River Quest 2019

May 13-16, 2019

"Maritime Oil Spill Response"

USCG MSU Duluth

515 W. 1st St., Duluth, Minnesota 55802 (218) 725-3800 MN Science Standard 7.4.4.1.2 Human Interactions with Living Systems

Next Generation (WI) Standard MS-ETS1-2 Engineering Design

Learning Question

What does oil look like on the water and how do you recover the oil when it is spilled?

Objectives

- 1) Identify different types of oil and describe how they look in water.
- 2) Using various recovery methods, demonstrate and describe the advantages and disadvantages of each.
- 3) Identify what happens to oil in the water column when a dispersant agent is used.
- 4) Identify what happens to oil when it is washed up on a beach.

Voca<u>bulary</u>

The following are vocabulary words which will be used in the demonstration:

Absorbent Bioremediation Oil
Adsorbent Boom Sheen
Biodegradation Dispersant Skimmer

Implementation

The Coast Guard and Coast Guard Auxiliary will staff a learning station featuring hands-on demonstrations of the different recovery methods of discharged oil. Students also will learn the effects of oil in the environment and gain a better understanding of different types of oil and what they look like in the environment.

References

Federal Water Pollution Control Act Section 311 (FWPCA): 33 U.S.C. §1321 (c)

Oil Pollution Act of 1990 (OPA-90): 33 U.S.C. §§2701-2762

National Contingency Plan (NCP): 40 CFR Part 300