

Biological Oils

Nearly a decade ago the Washington State Legislature changed the definition of 'oil' to include biological oils. This inclusion allows Ecology to respond to and cleanup biological oil and biodiesel spills, and protect Washington waters by monitoring practices and creating safety criteria for vessels that transport biological products. The definition also aligns with the federal characterization of oil. This inclusion allows Ecology to regulate biodiesel facilities and protect Washington waters by monitoring practices and creating safety criteria for vessels that move biological products.



Birds covered in cooking oil that spilled into White Center Pond, Nov., 2015.

How bad are biological oil spills?

Basic vegetable oils and animal fats share common physical properties with petroleum oils and produce similar environmental effects.

According to the Environmental Protection Agency, like petroleum oils, vegetable oils and animal fats contain components that can:

- Cause devastating physical effects, such as coating animals and plants with oil and suffocating them by oxygen depletion.
- Be toxic and form toxic products.
- Destroy future and existing food supplies, breeding animals, and habitats.
- Produce rancid odors.
- Foul shorelines, clog water treatment plants, and catch fire when ignition sources are present.
- Form products that linger in the environment for many years.

All oil – even cooking oil – impacts the environment

All oil spills cause environmental damage, regardless of size. Oil is toxic to the environment and damage starts as soon as oil hits water. A single quart of oil has the potential to foul more than 100,000 gallons of water.

WHY IT MATTERS

Good planning is a must to implement rapid, aggressive and well-coordinated responses to biological oil spills.

Like petroleum oil transporters, biological oils movers need to be aware of the harmful threats posed by their cargo and be ready to respond if needed.

Having good contacts and being familiar with contingency plans drives response times down, lessening economic and environmental damage.

Contact

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Cooking and other edible oils, while less toxic to wildlife than petroleum products, still cause environmental harm. These oils generally do not evaporate, emulsify, or disperse in water, so they tend to create slicks on the surface of water, coat shorelines, and sink to smother subtidal organisms.

When birds come into contact with oil, it coats their feathers and they lose insulation and buoyancy. Oiled otters and fur seals can also lose insulation and become hypothermic. Fish and shellfish can suffocate when oil coats their bodies. Oil damages habitat for other aquatic life by reducing oxygen levels, and creating physical impacts on the water surface and shoreline.

