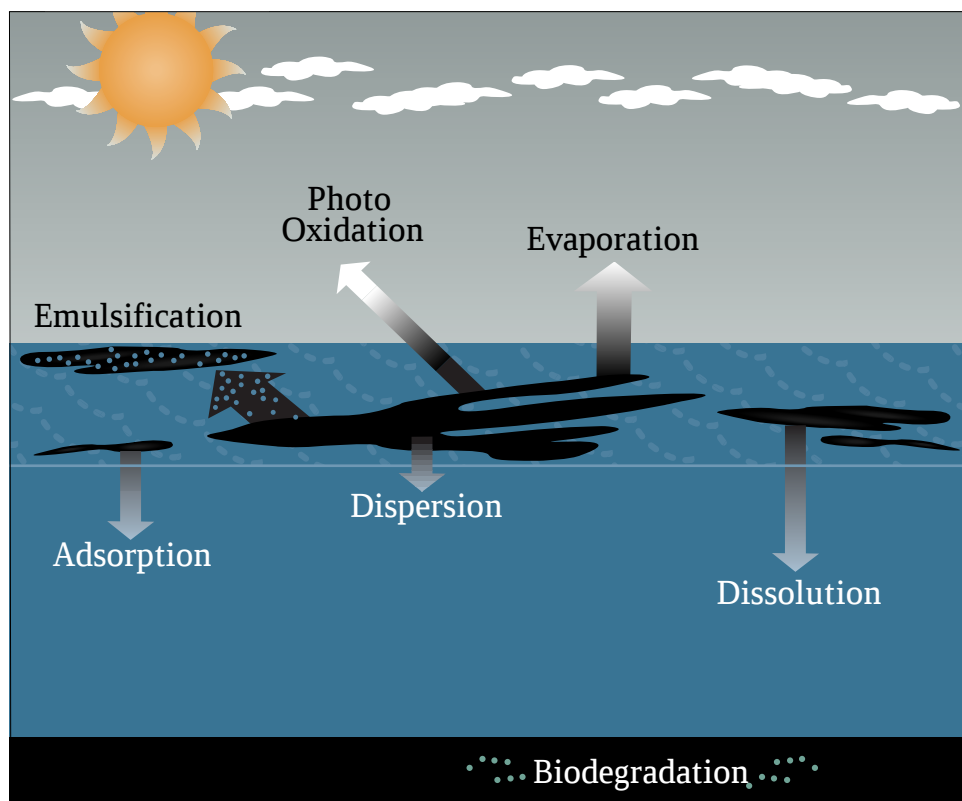


Weathering Processes Affecting Crude Blend Spills



Emulsification is generally the primary weathering process of concern with spilled crude blends. Many crude blends emulsify quickly when spilled, creating a stable mousse that causes a persistent cleanup and removal challenge.

Adsorption*

The process by which one substance is attracted to and adheres to the surface of another substance without actually penetrating its internal structure

Biodegradation

The degradation of substances resulting from their use as food energy sources by certain micro-organisms including bacteria, fungi, and yeasts

Dispersion

The distribution of spilled oil into the upper layers of the water column by natural wave action or application of chemical dispersants

Dissolution

The act or process of dissolving one substance in another

Emulsification

The process whereby one liquid is dispersed into another liquid in the form of small droplets

Evaporation

The process whereby any substance is converted from a liquid state to become part of the surrounding atmosphere in the form of a vapor

Photo Oxidation*

Sunlight-promoted chemical reaction of oxygen in the air and oil

*not modeled by NOAA's ADIOS model

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