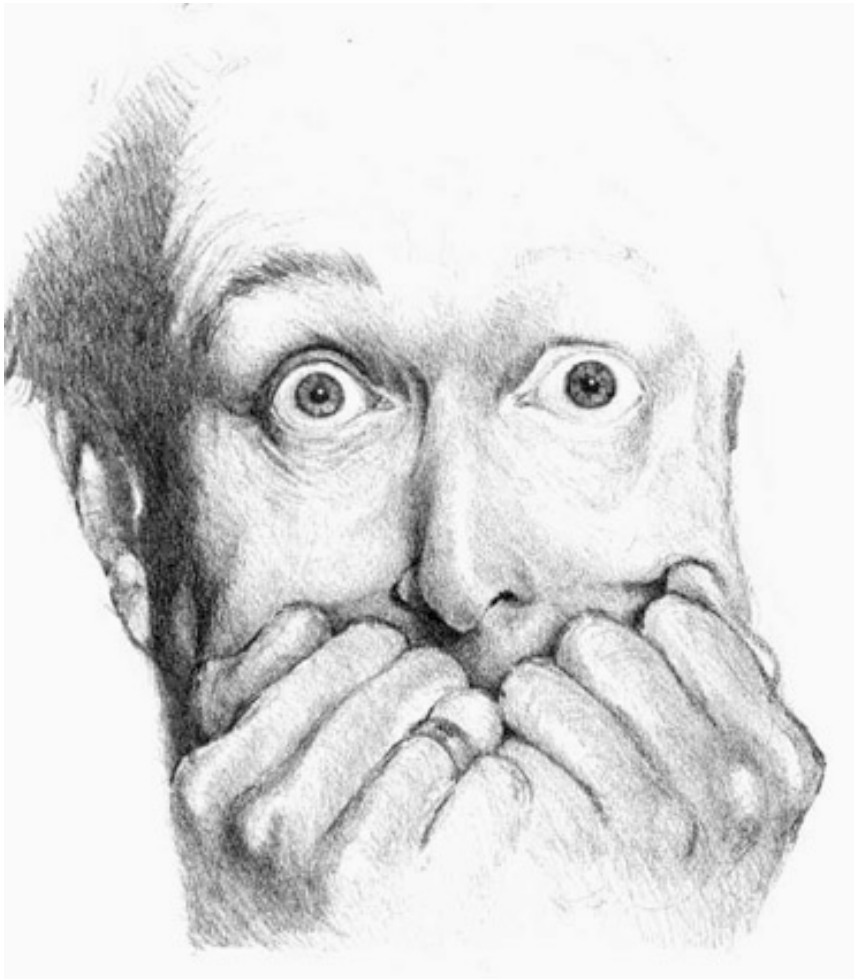
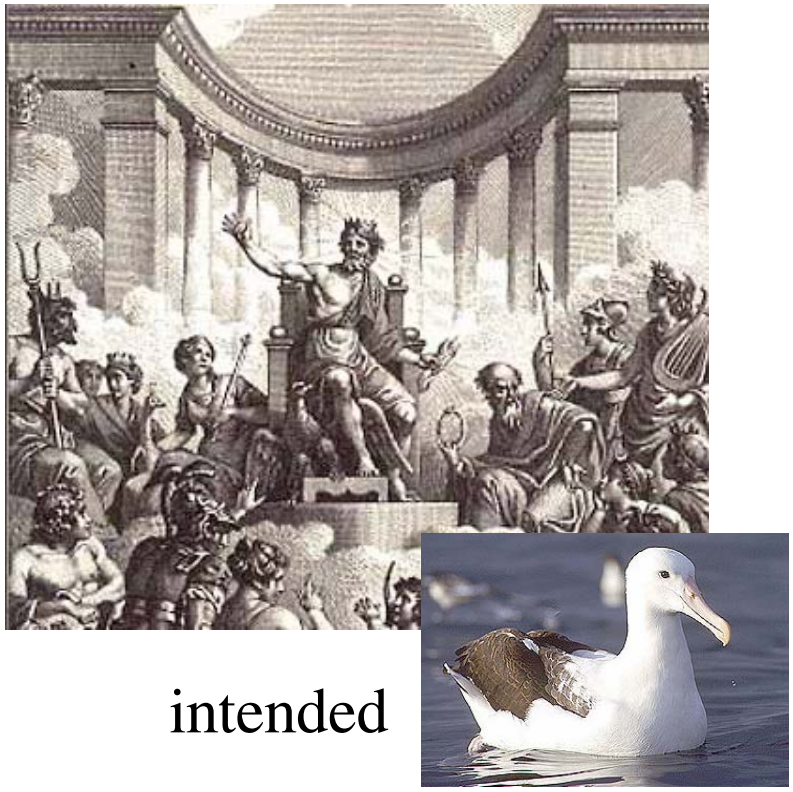
Dispersant Fate Reactions



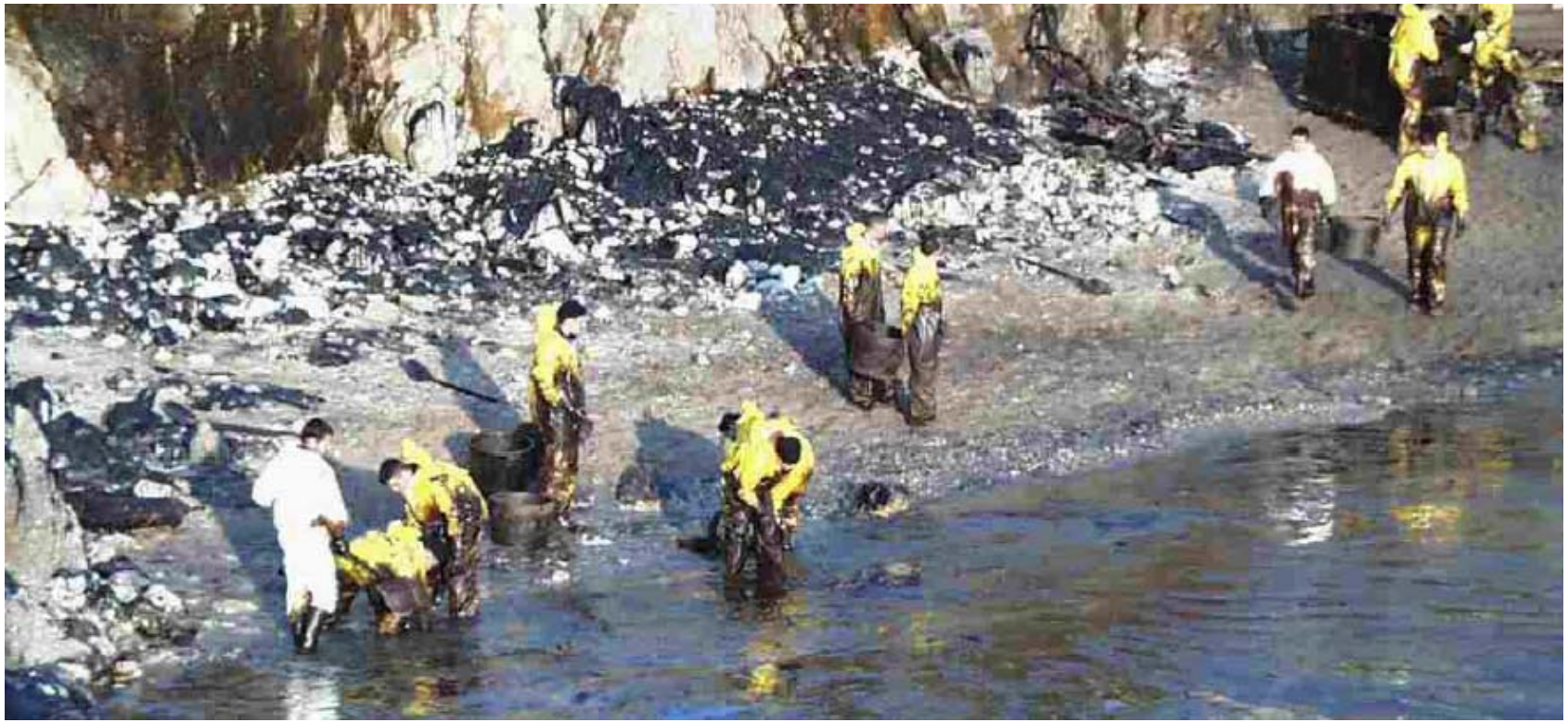
Look at all the consequences



intended

unintended

What you are trying to avoid

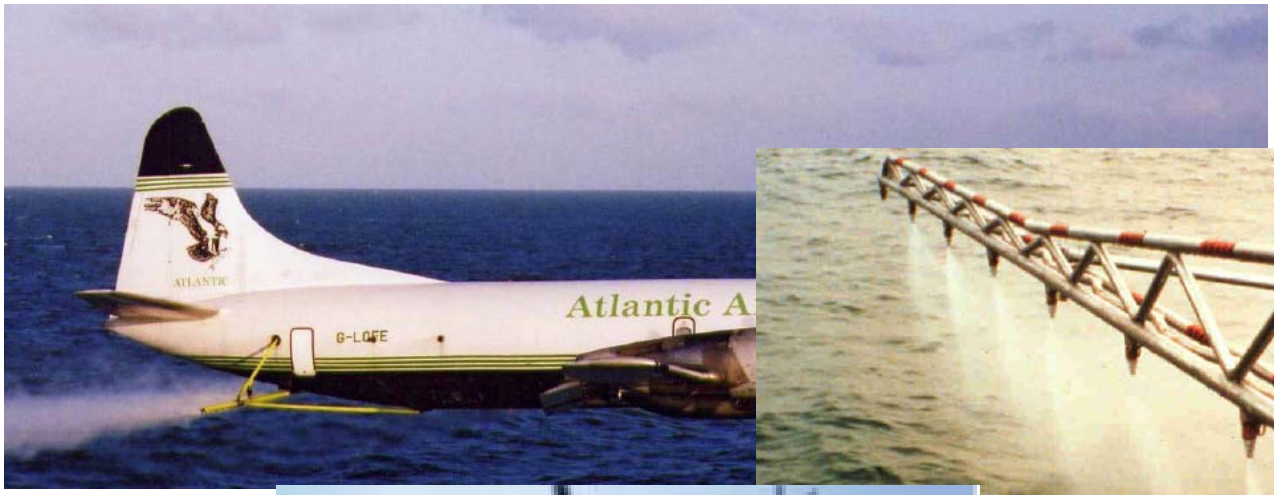


What you might get

Get your baseline survey

How do you know it was effective?

The weapons

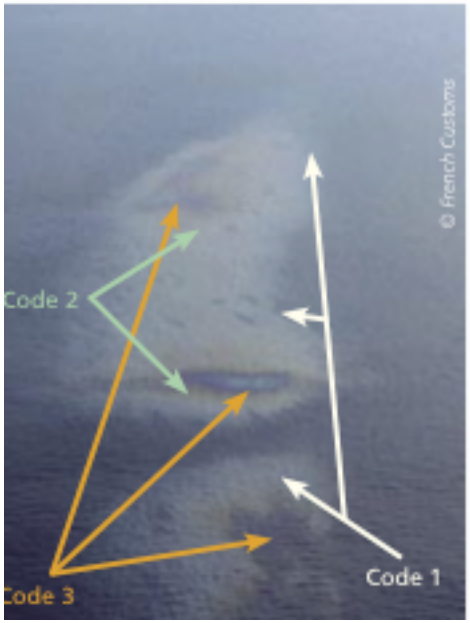


The target

The Bonn Agreement Oil Appearence Code

B1

Research conducted by the Bonn Agreement has led to the adoption of an oil appearance code. This code is the result of scientific endeavour seeking to determine spilled oil quantities on the basis of aerial observation and should be used in preference to any other code.



Description Appearance	Layer Thickness Interval (µm)	Litres per km²
1. Sheen (silvery/grey)	0.04 to 0.30	40 – 300
2. Rainbow	0.30 to 5.0	300 – 5 000
3. Metallic	5.0 to 50	5 000 – 50,000
4. Discontinuous True Oil Colour	50 to 200	50 000 - 200 000
5. Continuous True Oil Colour	200 to more than 200	200 000 - More than 200 000

This code applies since January 2004 and is used for characterising slick thickness and assessing spills.

Will it disperse?

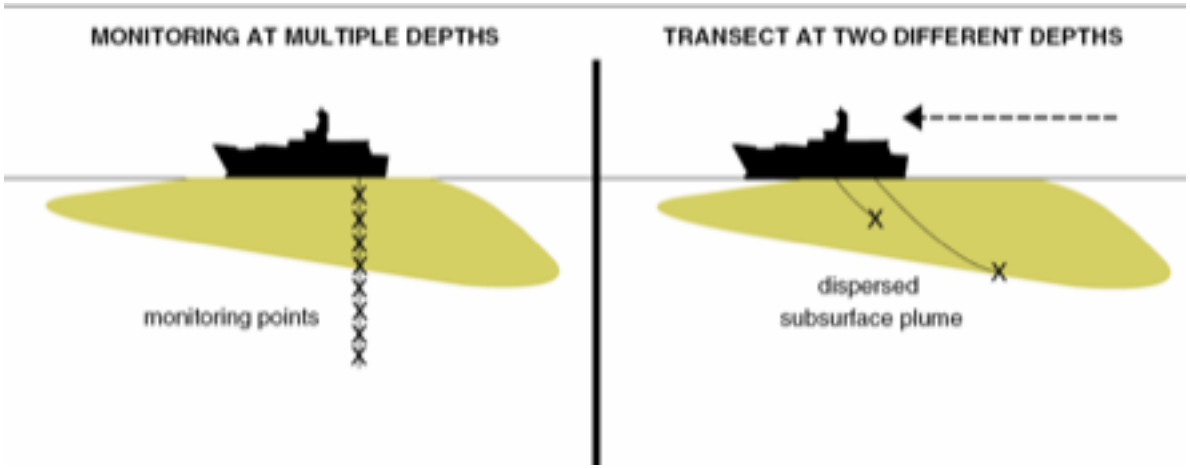
$$droplet\ \ size \propto \frac{viscosity^{3/5}}{energyDisp^{1/5}}$$

Davies, Chem Eng. Sci. vol 40

1 cst	water
2000 cst	castor oil
10,000 cst	corn syrup

Tracking the oil

Is there dispersed oil?



Be prepared for the unexpected