

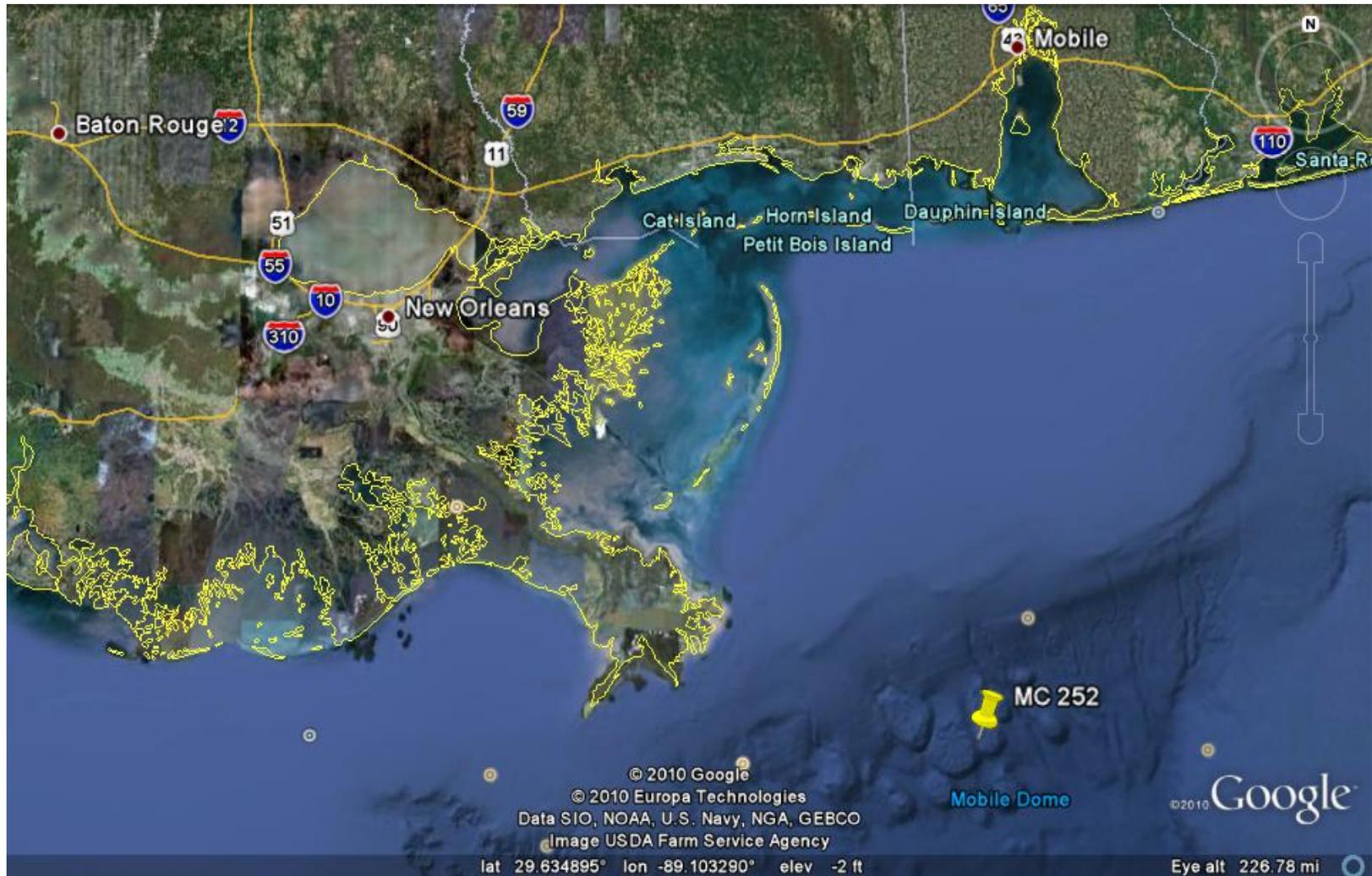
Dispersant Usage Deep Water Horizon Oil Spill



Henry Folmar
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BP Oil Spill

Mississippi Canyon 252



Dispersant Usage

- 1.8 million gallons dispersant used.
- Primarily COREXIT 9500A.
- Used to breakdown the oil into smaller particles.
- Helps keep oil out of the marsh, makes it more available microbes.
- Injected into the oil at the well head, and applied to oil on the surface.
- Only applied in the open Gulf, none in Mississippi Waters.

COREXIT 9500A Toxicity

- MSDS Hazard Rating same as Dawn Dishwashing Liquid: Slight for health, Slight for flammability.
- Ingredients:
 - Propylene Glycol used in antifreeze, health and beauty aids, and as a food additive.
 - Sulfonic Acid Salt, pharmaceutical.
 - Petroleum Distillates, mineral spirits.
- Less toxic than household cleaners such as Clorox and ammonia.

Dose Makes the Poison

- Corexit 9500A: toxic to brine shrimp at 20 ppm.
- If all the dispersant was dumped at one time into a one mile square at the well site concentration = 0.2 parts per trillion.
- Gross overestimate of the actual concentration, since it was not dispensed at one place at one time.
- Actually dispensed over hundreds of square miles over a 2 month period.

Toxic to Brine Shrimp 20 parts per million



0.2 parts per billion
1/5 drop per tank car



RRPictureArchives.NET Image Contributed by Joe Rogers

Estimated Concentration Near Well
0.2 parts per trillion
1/5 drop in string of tank cars 10 miles long.



EPA Dispersant Toxicity Tests

Recent tests by EPA showed that:

- The mixture of oil and the 8 dispersants tested was less toxic to fish and mysid shrimp than the oil alone.
- COREXIT 9500A was no more toxic than the other available dispersants.



Summary

- Dispersants were used to protect our most valuable habitat, salt marshes.
- COREXIT 9500A is comprised of chemicals commonly found in our homes.
- It is less toxic than many chemicals we use regularly.
- Due to dilution and evaporation in the open Gulf, the concentrations are quickly reduced to non-toxic levels.
- While there are some risks to the person applying the chemical, and to aquatic life that may get directly sprayed, the dispersant does not represent a significant long term risk to the general public or to the environment.

Questions?

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