



# **2010 Deepwater Horizon Oil Spill Status Report on Seafood Safety**

**Gulf Ecosystem Restoration Task Force**

**Marriott Canal, New Orleans, LA**

**February 27-28, 2011**



## Presentation Overview

- Preventive measures
- Re-opening protocol
- Seafood safety criteria and methods
- Testing for re-opening and results
- Extended surveillance testing and results
- Federal and state interagency coordination



## Preventive Measures

- Closure of oil-spill impacted waters to commercial & recreational watercraft and fishing
- Closure of areas expected to be impacted by oil to commercial or recreational watercraft and fishing
- Performance of HACCP Inspections at Primary Seafood Processors & Wholesalers across Gulf Coast



## Re-opening Protocol

- Developed by federal and state multi-agency consensus – completed May 13, 2010
- Established strict criteria for decision-making and the assessment of Seafood Safety



## Criteria for Ensuring Seafood Safety

(view at [www.fda.gov](http://www.fda.gov) “Gulf of Mexico Oil Spill update”)

Chemical <sup>1</sup>	Levels of Concern (ppm)			Basis
	13 g/day (Shrimp and Crabs)	12 g/day (Oysters)	49 g/day (Finfish)	
Naphthalene	123	133	32.7	Non-cancer EPA RfD <sup>2</sup> ; 80kg bw
Fluorene	246	267	65.3	Non-cancer EPA RfD <sup>2</sup> ; 80kg bw
Anthracene	1846	2000	490	Non-cancer EPA RfD <sup>2</sup> ; 80kg bw
Pyrene	185	200	49.0	Non-cancer EPA RfD <sup>2</sup> ; 80kg bw
Fluoranthene	246	267	65.3	Non-cancer EPA RfD <sup>2</sup> ; 80kg bw
Chrysene	132	143	35.0	Cancer 0.001 BaP equivalent <sup>3</sup>
Benzo(k)fluoranthene	13.2	14.3	3.5	Cancer 0.01 BaP equivalent <sup>3</sup>
Benzo(b)fluoranthene	1.32	1.43	0.35	Cancer 0.10 BaP equivalent <sup>3</sup>
Benzo(a)anthracene	1.32	1.43	0.35	Cancer 0.10 BaP equivalent <sup>3</sup>
Indeno(1,2,3-cd)pyrene	1.32	1.43	0.35	Cancer 0.10 BaP equivalent <sup>3</sup>
Dibenz(a,h)anthracene	0.132	0.143	0.035	Cancer 1.0 BaP equivalent <sup>3</sup>
Benzo(a)pyrene	0.132	0.143	0.035	10 <sup>-2</sup> Cancer risk = (0.110 µg/person/day)/(78/5 yr) <sup>3</sup>



## Testing to Re-open Waters for Fishing Performed June – November 2010

- FDA tested seafood from state waters
- NOAA tested seafood from federal waters
- All seafood was tested using
  - 1 Organoleptic assessment
  - 2 instrumental analyses
- Methods details can be viewed at [www.fda.gov](http://www.fda.gov)  
“Gulf of Mexico Oil Spill Update”



## Testing to Re-open Waters for Fishing

June – November 2010

(continued)

- 2,824 specimens collected from state waters and tested by organoleptic and instrumental analyses
- 5,387 specimens collected from federal waters and tested by organoleptic and instrumental analyses
- 20% of all tests verified by repeat testing in other laboratories
- 50% of specimens subjected to testing for dispersant residue



## Results from Testing to Re-open Waters for Fishing

June – November 2010

- Polycyclic aromatic hydrocarbon (PAH) levels in all test samples found to be 100 to 1000 times below levels of concern
- Dispersant (DOSS) levels in all test samples found to be below LOD in majority of samples and > 1000 times below level of concern in the few samples in which it was detected
- Results are available at [www.fda.gov](http://www.fda.gov) > More Public Health Focus > Gulf of Mexico Oil Spill Update





## Extended Surveillance Testing Plan

October 1, 2010 to October 1, 2012

- Sample collection from 118 primary processors or wholesalers across the Gulf Coast
- 42 seafood specimens targeted for collection from each firm
- 4,956 total oysters, crabs & shrimp targeted
- Actual number of specimens collected contingent upon seasonal availability of products.



## Extended Surveillance Testing Completed

For the period October 1, 2010 to February 23, 2011

- 106 seafood primary processors or wholesalers inspected and samples collected
- 1,406 seafood specimens tested
- Average of 281 specimens tested per month



## Results from Extended Surveillance Testing

Completed from 1 October 2010 to 23 February 2011

- Polycyclic aromatic hydrocarbon (PAH) levels in all test samples found to be 100 to 1000 times below levels of concern
- Dispersant (DOSS) levels in all test samples found to be below LOD in majority of samples and > 1000 times below level of concern in the few samples in which it was detected



## Federal – State Interagency Coordination

- NMFS and State public health agencies also testing for PAH and dispersant residues
- FDA, NMFS and State cooperation on uniformity of methods established
- Seafood testing will be continued for 2 years by FDA
- Need for continued testing after October 2012 will be determined after review of data at that time



## Deepwater Horizon Oil Spill Status of Seafood Safety

Fish and shellfish harvested from areas reopened or unaffected by the DWH oil spill closures are considered safe to eat