

US EPA ARCHIVE DOCUMENT



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 “Gulf of Mexico Oil Spill update”)

Chemical ¹	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 ² ; 80kg bw
Fluorene	246	267	65.3	Non-cancer EPA RfD ² ; 80kg bw
Anthracene	1846	2000	490	Non-cancer EPA RfD ² ; 80kg bw
Pyrene	185	200	49.0	Non-cancer EPA RfD ² ; 80kg bw
Fluoranthene	246	267	65.3	Non-cancer EPA RfD ² ; 80kg bw
Chrysene	132	143	35.0	Cancer 0.001 BaP equivalent ³
Benzo(k)fluoranthene	13.2	14.3	3.5	Cancer 0.01 BaP equivalent ³
Benzo(b)fluoranthene	1.32	1.43	0.35	Cancer 0.10 BaP equivalent ³
Benzo(a)anthracene	1.32	1.43	0.35	Cancer 0.10 BaP equivalent ³
Indeno(1,2,3-cd)pyrene	1.32	1.43	0.35	Cancer 0.10 BaP equivalent ³
Dibenz(a,h)anthracene	0.132	0.143	0.035	Cancer 1.0 BaP equivalent ³
Benzo(a)pyrene	0.132	0.143	0.035	10 ⁻² Cancer risk = (0.110 µg/person/day)/(78/5 yr) ³



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
“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 > 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