

Office of Environmental Health Hazard Assessment



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Edmund G. Brown Jr.
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MEMORANDUM

TO: Charlton H. Bonham, Director
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FROM: Lauren Zeise, Ph.D. 
Acting Director

DATE: April 22, 2016

SUBJECT: RECOMMENDATION ON OPENING OF ROCK CRAB FISHERY SOUTH OF 36° 58.72' N LATITUDE, WITH ONE EXCEPTION

The Office of Environmental Health Hazard Assessment (OEHHA) has determined, in consultation with the California Department of Public Health (CDPH), that consumption of rock crab taken from coastal state waters south of 36° 58.72' N Latitude (Sand Hill Bluff, approximately 9 miles north of Santa Cruz Harbor entrance) no longer poses a significant threat for domoic acid exposure. The areas north of this line and between Santa Rosa and Santa Cruz islands, as defined below, remain closed.

This determination is based on data from repeated sampling of rock crab taken from California waters and analysis of these samples by CDPH laboratories.

The current federal action levels for domoic acid in Dungeness crab are 20 parts per million (ppm) in the body meat and 30 ppm in the viscera. In contrast to levels seen earlier, levels of domoic acid in recent viscera samples of rock crab caught from state waters south of 36° 58.72' N Latitude did not test above the action level of 30 parts per million (ppm). As such, OEHHA, in consultation with CDPH, recommends the opening of the rock crab fishery in state waters in this area, in a manner consistent with the emergency regulations adopted by the Fish and Game Commission and the California Department of Fish and Wildlife (CDFW) on November 5 and 6, 2015, respectively.

California Environmental Protection Agency

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The sampling results for rock crab caught in waters south of 36° 58.72' N Latitude are provided in the table below.

In conjunction with the reopening, OEHHA and CDPH are advising that people not eat the crab viscera – the internal organs, also known as “butter” or “guts” of crabs. We are also recommending that water or broth used to cook crabs be discarded and not used to prepare dishes such as sauces, broths, soups, or stews. The viscera usually contain much higher levels of domoic acid than crab body meat. When whole crabs are cooked in liquid, domoic acid may leach from the viscera into the cooking liquid. This recommendation is intended to avoid harm in the unlikely event that some crabs taken from an open fishery have elevated levels of domoic acid. These recommendations will be provided in an advisory on domoic acid in crab being released concurrently by CDPH today.

Domoic acid poisoning in humans may occur within minutes to hours after consumption of affected seafood and can result in signs and symptoms ranging from vomiting and diarrhea to permanent loss of short-term memory (Amnesic Shellfish Poisoning), coma, or death.

As noted above, in addition to areas north of 36° 58.72' N Latitude, one area between Santa Rosa and Santa Cruz Islands remains closed to rock crabbing. This area is bounded by straight lines connecting the following points in the order listed:

- Point 1: 34° 7.75' N latitude 120° 0.00' W longitude;
- Point 2: 34° 7.75' N latitude 119° 50.00' W longitude;
- Point 3: 33° 53.00' N latitude 119° 50.00' W longitude;
- Point 4: 33° 53.00' N latitude 120° 0.00' W longitude; and
- Point 5: 34° 7.75' N latitude 120° 0.00' W longitude

Monitoring and analysis of Dungeness and rock crabs in areas that remain closed are continuing by CDFW, CDPH, and OEHHA to determine when the crab fisheries in these areas can safely be opened.

If you have questions, please contact me at Lauren.Zeise@oehha.ca.gov or (916) 322-6325.

Charlton H. Bonham and Michael Yaun

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cc: Matthew Rodriguez
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Sampling Results for Monterey

Port	Sample Collection Date	Number Of Samples	Viscera Sample Results: Range	Average Level In Viscera	Samples Exceeding Action Level (30 ppm in Viscera)
Monterey	9/15/15 (Red Rock Crab)	4	16-86 ppm	45 ppm	75%
	9/16/15 (Yellow Rock Crab)	1	190 ppm	190 ppm	100%
	11/12/15 (Rock Crab)	6	7.9-94 ppm	41 ppm	50%
	12/2/15 (Rock Crab)	8	3.4-100 ppm	23.7 ppm	12.5%
	12/10/15 (Rock Crab)	6	<2.5-100 ppm	36 ppm	50%
	12/19/15 (Rock Crab)	3	31-100 ppm	69.6 ppm	100%
	1/3/16 (Rock Crab)	6	<2.5-47 ppm	13.2 ppm	17%
	1/10/16 (Rock Crab)	5	<2.5-25 ppm	8.4 ppm	0%
	1/21/16 (Rock Crab)	6	<2.5-67 ppm	12.5 ppm	17%
	2/3/16 (Rock Crab)	6	<2.5-15 ppm	5 ppm	0%
	2/14-2/15/16 (Rock Crab)	5	6-55 ppm	20 ppm	20%
	2/24/16 (Rock Crab)	6	<2.5-27 ppm	7 ppm	0%
	3/2/16 (Rock Crab)	6	2.5-42 ppm	23 ppm	50%
	3/17/16 (Rock Crab)	6	<2.5-21 ppm	7 ppm	0%
	4/1/16 (Rock Crab)	6	<2.5-94 ppm	16 ppm	17%
	4/7/16 (Rock Crab)	6	Non-detectable	<2.5 ppm	0%
	4/18/16 (Rock Crab)	6	<2.5-24 ppm	4 ppm	0%