

STAFF SUMMARY FOR JULY 19, 2016

3. RECREATIONAL ROCK CRAB EMERGENCY**Today's Item**Information Action

Consider re-adopting emergency regulations for the Dungeness crab and rock crab fisheries due to elevated levels of domoic acid.

Summary of Previous/Future Actions

- | | |
|---|------------------------------|
| • Adopt emergency crab regulations | Nov 5, 2015; Teleconference |
| • Re-adopted emergency regulations | Apr 13-14, 2016; Santa Rosa |
| • Today re-adopt emergency regulations | Jul 19, 2016; Teleconference |

Background

On Nov 5, 2015, FGC adopted emergency regulations to delay the opening of the recreational Dungeness crab fishery statewide and to close the recreational rock crab fishery north of the Ventura/Santa Barbara county line due to persistently high levels of domoic acid, under recommendation from the Office of Environmental Health Hazard Assessment (OEHHA) in consultation with the California Department of Public Health (CDPH); DFW adopted similar regulations for the commercial fisheries. Emergency regulations were re-adopted in Apr 2016. The previous FGC emergency crab regulations will expire on Aug 3, 2016.

Pursuant to the regulations adopted and re-adopted by FGC, certain state waters along the California coast have reopened based on the results of domoic acid testing indicating levels below the federal action level and resulting recommendations of OEHHA in consultation with the director of CDPH. However, current monitoring results (Exhibit 4) indicate that domoic acid levels in rock crab are persisting above the federal action level in some areas of the state, and an emergency closure remains in effect for rock crabs caught in state waters north of Pigeon Point in San Mateo County (Latitude 37° 11' N). As determined by the director of OEHHA, in consultation with the director of CDPH, consuming crab from these areas poses a significant risk to public health; since current regulations will expire on Aug 3, 2016, readopting the emergency regulations for an additional 90 days is necessary for the preservation of public health.

Note that because the recreational Dungeness crab season will have closed before the current emergency extension has expired, this second re-adoption of the regulations *will have no impact on the recreational Dungeness crab fishery*. However, the most expeditious method for maintaining the rock crab closure north of Pigeon Point is to re-adopt the existing emergency regulations rather than pursue an entirely new emergency regulation.

Pursuant to Section 11346.1(h), Government Code, OAL may approve not more than two re-adoptions, each for a period not to exceed 90 days, of an emergency regulation that is the same as or substantially equivalent to an emergency regulation previously adopted by that agency. This action is for the second 90-day extension which will allow the original emergency action to remain in place pending completion of a process to address health-based emergency crab closures in the long-term.

STAFF SUMMARY FOR JULY 19, 2016

Recognizing the need for improvements in the way California addresses harmful algal blooms (HABs) and protecting human health, a task force led by the California Ocean Protection Council (OPC) and composed of CDPH, OEHHA, DFW, and FGC staff, is proactively pursuing a science working group on HABs and a set of standard operating procedures for the state agencies. The task force is creating a standard operating procedure for delineating the process, timing and manner in which a fishery should be closed in the event of another health concern; the procedure will also outline the process and chain of custody for monitoring efforts and is expected to be complete before the end of 2016. FGC staff has suggested that part of the procedure should also delineate the manner in which closed fisheries would be reopened.

In addition, legislation has been introduced (SB 1287) that would grant authority to the director of DFW to immediately close or restrict any fishery that is likely to pose a human health risk from high levels of toxic substances; such closures or restrictions would be exempt from the Administrative Procedure Act and would preclude the need for FGC to hold emergency meetings to adopt emergency regulations in such instances.

Significant Public Comments (N/A)**Recommendation**

FGC staff: Re-adopt emergency regulations related to recreational Dungeness crab and rock crab fisheries closures due to elevated levels of domoic acid.

Exhibits

1. [Statement of proposed emergency regulatory action and regulatory text](#)
2. [Original statement of proposed emergency regulatory action](#), effective Nov 5, 2015 – May 3, 2016 (File No. 2015-1105-01E)
3. [Statement of proposed emergency regulatory action](#), effective May 4, 2016 – Aug 2, 2016 (File No. 2016-0421-02EE)
4. [Summary of Domoic Acid Levels in Crab](#), CDPH, received Jun 23, 2016

Motion/Direction

Moved by _____ and seconded by _____ that the Commission determines, pursuant to Section 240 of the Fish and Game Code, adoption of this regulation is necessary for the immediate protection of public health from ingesting elevated levels of poisonous domoic acid detected in recent samples of crab, specifically rock crab caught in state waters north of Pigeon Point in San Mateo County (Latitude 37° 11' N).

Therefore, the Commission amends and re-adopts the emergency changes to Section 29.85, Title 14, related to the recreational Dungeness crab and rock crab fisheries for the immediate preservation of public health in the areas identified above.

CALIFORNIA FISH AND GAME COMMISSION
STATEMENT OF PROPOSED EMERGENCY REGULATORY ACTION
FOR RE-ADOPTION OF EMERGENCY REGULATIONS

Emergency Action to Re-adopt Amendments to Section 29.85,
Title 14, California Code of Regulations
Re: Emergency closure of recreational Dungeness and rock crab fisheries
due to elevated levels of domoic acid

I. Statement of Facts Constituting Need for Emergency Regulatory Action

The Fish and Game Commission (Commission) is re-adopting amendments to Section 29.85, Title 14, California Code of Regulations (CCR) [Office of Administrative Law (OAL) file numbers 2015-1105-01E and 2016-0421-02EE] .

The California Fish and Game Commission (Commission) submitted an emergency rulemaking that was filed by the Office of Administrative Law (OAL) on November 5, 2015, after samples of Dungeness and rock crabs were found to contain high domoic acid levels. The emergency rulemaking closed the recreational rock crab fishery north of the Ventura/Santa Barbara county line and delayed the opening of the recreational Dungeness crab fishery statewide.

In April 2016 the Commission re-adopted the substantially equivalent emergency regulations, which were filed with OAL on April 21, after samples of Dungeness and rock crabs in some areas were found to still contain high domoic acid levels.

The Office of Environmental Health Hazard Assessment (OEHHA), in cooperation with the California Department of Fish and Wildlife (Department), has continued to regularly monitor domoic acid levels in rock crab and Dungeness crab along the California coast since the emergency regulations were filed. Pursuant to the emergency regulations adopted in November 2015 and their re-adoption in April 2016, the following state waters have been reopened for recreational fishing based on the recommendations of OEHHA in consultation with the director of the California Department of Public Health (CDPH):

1. On December 31, 2015, the recreational Dungeness crab and rock crab fisheries were reopened in state waters south of 35° 40' N. Latitude (near Piedras Blancas Light Station).
2. On February 11, 2016, the recreational Dungeness crab fishery was reopened in state waters south of 38° 00' N. Latitude (near Point Reyes).
3. On March 18, 2016, the recreational Dungeness crab fishery was reopened in state waters south of the Mendocino/Sonoma county line (near Gualala).
4. On March 28, 2016, the recreational rock crab fishery was reopened in the Channel Islands, with the exception of state waters between Santa Cruz and Santa Rosa islands.
5. On April 22, 2016 state waters were reopened for the recreational rock crab fishery south of Sand Hill Bluff in Santa Cruz County (Latitude 36°

58.72' N) and the recreational Dungeness crab fishery was opened south of the northern jetty of Humboldt Bay in Humboldt County (Latitude 40° 46.15' N).

6. On May 2, 2016 the recreational Dungeness crab fishery was reopened statewide except for one area within Humboldt County; the area north of 40°46.15' N Latitude (a line extending due west from the west end of the north jetty at the entrance of Humboldt Bay) and south of 41° 17.60' N Latitude (a line extending due west from the mouth of Redwood Creek, Humboldt County) remained closed.
7. On May 19, 2016 the recreational Dungeness crab fishery was reopened statewide on June 3, 2016 state waters were reopened for the recreational rock crab fishery around the Channel Islands between Santa Cruz and Santa Rosa Islands.
8. On July 6, 2016 the recreational rock crab fishery was reopened in state waters south of Pigeon Point in San Mateo County (Latitude 37° 11' N).

Past history with such situations suggested that the emergency would resolve itself within the original 180 days as domoic acid levels naturally subsided. However, high domoic acid levels are persisting in some areas of the state as indicated by ongoing sampling. Therefore, the Commission re-adopted the emergency regulations for an additional period of 90 days following the first re-adoption 90-day effective time period, which ends on August 3. The second re-adoption is necessary to continue the emergency closures in those ocean waters of the state with persistently high levels of domoic acid.

Consuming crab from areas with persistently high levels of domoic acid poses a significant risk to public health as determined by the Director of OEHHA, in consultation with the Director of CDPH. Thus readopting the emergency closure for an additional period of 90 days beyond the initial 180-day period and the first re-adoption 90-day period is necessary for the preservation of public health and safety.

Identification of Reports or Documents Supporting Factual Emergency

The Commission relied on the following documents in proposing this emergency rulemaking action:

- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Sonke Mastrup, Executive Director, California Fish and Game Commission, *Recommendations on Opening Dungeness and Rock Crab From Mainland Coasts of San Luis Obispo County and Counties to the South*, December 31, 2015.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation Regarding Opening of Dungeness Crab Fishery in State Waters South of 38° 00' N Latitude*, February 11, 2016.

- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on Opening of Dungeness Crab Fishery in State Waters South of the Sonoma/Mendocino County Line*, March 18, 2016.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on Opening Rock Crab Fishery near Channel Islands, with the Exception of One Area*, March 28, 2016.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on Opening of Dungeness Crab Fishery in State Waters of Mendocino and Portions of Humboldt Counties*, April 22, 2016.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on opening of Dungeness Crab Fishery in State Waters Between the California/Oregon Border and 41^o 17.60' N Latitude*, May 2, 2016
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on Opening of the Last Remaining Area Closed to Dungeness Crab Fishing*, May 19, 2016
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Valerie Termini, Executive Director, California Fish and Game Commission, *Recommendation on Opening of Rock Crab Fishery Near Channel Islands*, June 3, 2016
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Valerie Termini, Executive Director, California Fish and Game Commission, *Recommendation of Opening of Rock Crab Fishery in Portions of San Mateo County*, July 6, 2016

II. Regulatory Proposal

In response to the high domoic acid levels persisting in some areas of state ocean waters as indicated by continued sampling, the Commission re-adopted the emergency closure for an additional period of 90 days beyond the initial 180-day period and first re-adoption 90-day period as it is necessary for the preservation of the public health and safety.

Emergency recreational fishing closures would remain in effect for rock crabs caught in state waters north of Latitude 37° 11' N. at Pigeon Point in San Mateo County.

Closure of the recreational fishery shall remain in effect until the director of OEHHA, in consultation with the director of CDPH, determines that domoic acid levels in rock crab no longer pose a significant risk to public health and no longer recommends the fishery be closed.

The Department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person taking rock crab to call the Department's hotline or visit the Department's website to obtain the current status of any ocean water.

III. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

(a) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

None.

(b) Nondiscretionary Costs/Savings to Local Agencies:

None.

(c) Programs Mandated on Local Agencies or School Districts:

None.

(d) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code:

None.

(e) Effect on Housing Costs:

None.

IV. Re-adoption Criteria

Pursuant to Government Code Section 11346.1(h), the text of a re-adopted regulation must be the "same or substantially equivalent" to the text of the original emergency regulation. The language for the re-adopted regulatory

amendment is substantially equivalent to the language of the original emergency regulation.

In addition, Government Code Section 11346.1(h) specifies that the emergency rulemaking agency must demonstrate that it is making “substantial progress and has proceeded with due diligence” to comply with standard rulemaking provisions. At its July 19, 2016 meeting, the Commission received an update on testing and sampling levels and an overview of state ocean waters that have been reopened as well as those that remain closed due to elevated levels of domoic acid. Past history with such situations suggested that the emergency would resolve itself within the original 180 days as domoic acid levels naturally subsided. However, the Commission determined that an emergency situation still exists and re-adopted the emergency closure for an additional period of 90 days beyond the initial 180-day period as it is necessary for the preservation of public health and safety. Given this unique situation, a state interagency task force that includes the Commission has been created to proactively address harmful algal blooms that result in high levels of domoic acid and is working to identify solutions for more quickly addressing public health and safety. In addition, legislation has been introduced to grant authority for immediately closing fisheries due to harmful algal blooms.

V. Authority and Reference

The Commission proposes this emergency action pursuant to the authority vested by sections 200, 202, 205, 220, and 240 of the Fish and Game Code and to implement, interpret, or make specific sections 200, 202, 205, 206, 220, and 240 of said code.

VI. Section 240 Finding

Pursuant to Section 240 of the Fish and Game Code, the Commission finds that the adoption of this regulation is necessary for the immediate protection of public health and safety from elevated levels of domoic acid detected in samples of Dungeness and rock crab in ocean waters of the state.

Informative Digest (Plain English Overview)

The Fish and Game Commission (Commission) is re-adopting amendments to Section 29.85, Title 14, California Code of Regulations (CCR) [Office of Administrative Law (OAL) file numbers 2015-1105-01E and 2016-0421-02EE] .

The California Fish and Game Commission (Commission) submitted an emergency rulemaking that was filed by the Office of Administrative Law (OAL) on November 5, 2015, after samples of Dungeness and rock crabs were found to contain high domoic acid levels. The emergency rulemaking closed the recreational rock crab fishery north of the Ventura/Santa Barbara county line and delayed the opening of the recreational Dungeness crab fishery statewide.

In April 2016 the Commission re-adopted the substantially equivalent emergency regulations, which were filed with OAL on April 21, after samples of Dungeness and rock crabs in some areas were found to still contain high domoic acid levels.

The Office of Environmental Health Hazard Assessment (OEHHA), in cooperation with the California Department of Fish and Wildlife (Department), has continued to regularly monitor domoic acid levels in rock crab and Dungeness crab along the California coast since the emergency regulations were filed. Pursuant to the emergency regulations adopted in November 2015 and their re-adoption in April 2016, the following state waters have been reopened for recreational fishing based on the recommendations of OEHHA in consultation with the director of the California Department of Public Health (CDPH):

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6. On May 2, 2016 the recreational Dungeness crab fishery was reopened statewide except for one area within Humboldt County; the area north of 40°46.15' N Latitude (a line extending due west from the west end of the north jetty at the entrance of Humboldt Bay) and south of 41° 17.60' N Latitude (a line extending due west from the mouth of Redwood Creek, Humboldt County) remained closed.

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8. On July 6, 2016 the recreational rock crab fishery was reopened in state waters south of Pigeon Point in San Mateo County (Latitude 37° 11' N).

Past history with such situations suggested that the emergency would resolve itself within the original 180 days as domoic acid levels naturally subsided. However, high domoic acid levels are persisting in some areas of the state as indicated by ongoing sampling. Therefore, the Commission re-adopted the emergency regulations for an additional period of 90 days following the first re-adoption 90-day effective time period, which ends on August 3. The second re-adoption is necessary to continue the emergency closures in those ocean waters of the state with persistently high levels of domoic acid.

Consuming crab from areas with persistently high levels of domoic acid poses a significant risk to public health as determined by the Director of OEHHA, in consultation with the Director of CDPH. Thus readopting the emergency closure for an additional period of 90 days beyond the initial 180-day period and the first re-adoption 90-day period is necessary for the preservation of public health and safety.

Regulatory Action: The Commission re-adopted the emergency regulations for an additional period of 90 days following the initial 180-day effective time period, which ends on August 3. The second re-adoption is necessary to continue the emergency closures in those state ocean waters with persistently high levels of domoic acid as it is necessary for preserving public health and safety.

The Department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person taking Dungeness or rock crab to call the Department's hotline or visit to the Department's website to obtain the current status of any ocean water.

Benefits: The regulation will protect public health and safety by prohibiting possession of Dungeness and rock crab containing elevated levels of domoic acid.

The adopted regulations are neither inconsistent nor incompatible with existing state regulations. The Legislature has delegated authority to the Commission to promulgate sport fishing regulations (sections 200, 202, 205, 220, and 240, Fish and Game Code).

Regulatory Language

Section 29.85, Title 14, CCR, is amended to read:

29.85. Crab.

(a) Dungeness crabs (Cancer magister)

(1) ~~Closure:~~ Closures:

(A) Dungeness crab may not be taken from or possessed if taken from San Francisco Bay and San Pablo Bay, plus all their tidal bays, sloughs and estuaries between the Golden Gate Bridge and Carquinez Bridge.

(B) Dungeness crab may not be taken from or possessed if taken from ocean waters, including bays and estuaries, north of the Ventura/Santa Barbara County line where the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, has determined that Dungeness crab contain unhealthy domoic acid levels and recommends closing the fishery until such time as the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, determines that domoic acid levels in Dungeness crab no longer pose a significant risk to public health and no longer recommends the fishery be closed. Areas may be opened on a county-by-county basis. The department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person prior to taking Dungeness crab to call (831) 649-2883 or go to the department's website at www.wildlife.ca.gov/Fishing/Ocean/Health-Advisories to obtain the current status of any ocean water.

(2) Open season:

(A) Del Norte, Humboldt and Mendocino counties: From the ~~first Saturday in November~~ opening date determined through subsection (a)(1)(B) through July 30.

(B) All other counties: From the ~~first Saturday in November~~ opening date determined through subsection (a)(1)(B) through June 30.

(3) Limit: Ten.

(4) Not more than 60 crab traps are authorized to be used to take Dungeness crab from a vessel operating under authority of a Commercial Passenger Fishing Vessel License issued pursuant to Fish and Game Code Section 7920.

(5) Traps and trap buoys by a commercial passenger fishing vessel to take Dungeness crab under authority of this Section and Section 29.80 shall have the commercial boat registration number of that vessel affixed to each trap and buoy.

(6) No vessel that takes Dungeness crabs under authority of this section, or Section 29.80, shall be used to take Dungeness crabs for commercial purposes.

(7) Minimum size: Five and three-quarter inches measured by the shortest distance through the body from edge of shell to edge of shell directly in front of and excluding the points (lateral spines).

(b) All crabs of the *Cancer* genus except Dungeness crabs, but including: yellow crabs, rock crabs, red crabs and slender crabs:

(1) Rock crab closure:

(A) Rock crab may not be taken from or possessed if taken from ocean waters, including bays and estuaries, north of the Ventura/Santa Barbara County line

in state waters north of Pigeon Point in San Mateo County (Latitude 37° 11' N) where the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, has determined that rock crab contain unhealthy domoic acid levels and recommends closing the fishery until such time as the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, determines that domoic acid levels in rock crab no longer pose a significant risk to public health and no longer recommends the fishery be closed. Areas may be opened on a county-by-county basis. The department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person prior to taking rock crab to call (831) 649-2883 or go to the department's website at www.wildlife.ca.gov/Fishing/Ocean/Health-Advisories to obtain the current status of any ocean water.

~~(1)~~(2) Open season:

(A) Rock crab: The rock crab season will open on the date determined through subsection (b)(1)(A) and will remain open until [OAL to insert end date of emergency regulation].

(B) All other species: All year.

~~(2)~~(3) Limit: Thirty-five.

~~(3)~~(4) Minimum size: Four inches measured by the shortest distance through the body, from edge of shell to edge of shell at the widest part, except there is no minimum size in Fish and Game districts 8 and 9.

(c) All crabs of the genus *Cancer*, including Dungeness crabs, yellow crabs, rock crabs, red crabs and slender crabs, may be brought to the surface of the water for measuring, but no undersize crabs may be placed in any type of receiver, kept on the person or retained in any person's possession or under his direct control; all crabs shall be measured immediately and any undersize crabs shall be released immediately into the water.

(d) Sand crabs (*Emerita analoga*): Limit: Fifty.

Note: Authority cited: Sections 200, 202, ~~205 and 220~~205, 220 and 240, Fish and Game Code; Reference: Sections 200, 202, 205, ~~206 and 220~~206, 220 and 240, Fish and Game Code

CALIFORNIA FISH AND GAME COMMISSION
STATEMENT OF PROPOSED EMERGENCY REGULATORY ACTION

Emergency Action to
Amend Section 29.85,
Title 14, California Code of Regulations
Re: Emergency Closure of Recreational Dungeness and Rock Crab
Fisheries Due to Elevated Levels of Domoic Acid

I. Statement of Facts Constituting the Need for Emergency Regulatory Action

The recreational crab fishery is a multi-million dollar business with thousands of participants each year fishing from personal boats, charter vessel operations, and public piers and docks. Under existing law, crab may be taken for recreational purposes with a sport fishing license subject to regulations prescribed by the Fish and Game Commission (Commission).

Current regulations for recreational take of crab specify seasons, size limits, bag and possession limits, closed fishing areas, and gear restrictions. The Dungeness crab season is scheduled to open on Saturday, November 7, 2015. The rock crab season is currently open year-round.

A massive toxic bloom of the marine diatom *Pseudo-nitzschia* has been detected resulting in significant impacts to coastal resources and marine life. Some *Pseudo-nitzschia* species produce a potent neurotoxin, known as domoic acid, which can accumulate in shellfish, other invertebrates, and sometimes fish, leading to illness and death in a variety of birds and mammals. Recent test results have shown persistently high levels of domoic acid in Dungeness crab and rock crab, which have been caught along the California coastline.

Symptoms of domoic acid poisoning can occur within 30 minutes to 24 hours after eating toxic seafood. In mild cases, symptoms may include vomiting, diarrhea, abdominal cramps, headache and dizziness. These symptoms disappear within several days. In severe cases, the victim may experience trouble breathing, confusion, disorientation, cardiovascular instability, seizures, excessive bronchial secretions, permanent loss of short-term memory, coma, or death.

Domoic acid levels detected in recent samples have exceeded the State's action level for the crabs' body meat as well as the viscera, commonly referred to as crab butter, and therefore pose a significant risk to the public if they are consumed, as determined by the California Department of Public Health (CDPH). As a result, the Office of Environmental Health Hazard Assessment (OEHHA), in consultation with CDPH, has recommended the fisheries be closed. The Department, CDPH, OEHHA, and the Ocean Protection Council are coordinating

efforts to monitor toxicity levels and ensure public safety. This emergency situation clearly poses such an immediate, serious harm that delaying action to allow for public comment and notice requirements, pursuant to Section 11346.1 of the Government Code, would be inconsistent with the public interest.

Identification of Reports or Documents Supporting Factual Emergency

- California Department of Public Health, “CDPH Issues Warning about Dungeness and Rock Crabs Caught in Waters Along Central and Northern California Coast,” News Release, November 3, 2015.
- California Office of Environmental Health Hazard Assessment, “Domoic Acid Threat to Public Safety,” Memo, November 3, 2015.

Regulatory Proposal

The proposed regulation would prohibit recreational take and possession of Dungeness crab and all rock crab from ocean waters, including bays and estuaries, north of the Ventura/Santa Barbara county line. Closure of the fisheries shall remain in effect until the Director of OEHHA, in consultation with the Director of CDPH, determines that domoic acid levels in Dungeness crab no longer pose a significant risk to public health and no longer recommends the fishery be closed.

The Department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person taking Dungeness crab to call the Department’s hotline or visit the Department’s website to obtain the current status of any ocean water.

II. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

- (a) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

None.

- (b) Nondiscretionary Costs/Savings to Local Agencies:

None.

- (c) Programs Mandated on Local Agencies or School Districts:

None.

- (d) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code:

None.

- (e) Effect on Housing Costs:

None.

III. Authority and Reference

The Fish and Game Commission proposes this emergency action pursuant to the authority vested by sections 200, 202, 205, 220, and 240, of the Fish and Game Code and to implement, interpret, or make specific sections 200, 202, 205, 206, 220, and 240, of said Code.

IV. Section 240 Finding

Pursuant to Section 240 of the Fish and Game Code, the Commission finds that the adoption of this regulation is necessary for the immediate protection of public health that may result from elevated levels of domoic acid detected in samples of Dungeness and rock crab.

Informative Digest (Plain English Overview)

Current regulations for recreational take of crab specify seasons, size limits, bag and possession limits, closed fishing areas, and gear restrictions. The Dungeness crab season is scheduled to open on Saturday, November 7, 2015. The rock crab season is currently open year-round.

Proposed Regulatory Action: The proposed regulation would prohibit recreational take and possession of Dungeness crab and rock crab from ocean waters, including bays and estuaries, north of the Ventura/Santa Barbara county line. Closure of the fisheries shall remain in effect until the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, determines that domoic acid levels in Dungeness crab no longer pose a significant risk to public health and no longer recommends the fishery be closed.

The Department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person taking Dungeness crab to call the Department's hotline or visit to the Department's website to obtain the current status of any ocean water.

Benefits: The proposed regulation will protect public health by prohibiting possession of crab containing elevated levels of domoic acid.

The proposed regulations are neither inconsistent nor incompatible with existing state regulations. The Legislature has delegated authority to the Commission to promulgate sport fishing regulations (sections 200, 202, 205, 220, and 240, Fish and Game Code).

Regulatory Language

Section 29.85, Title 14, CCR, is amended to read:

29.85. Crab.

(a) Dungeness crabs (Cancer magister)

(1) ~~Closure:~~ Closures:

(A) Dungeness crab may not be taken from or possessed if taken from San Francisco Bay and San Pablo Bay, plus all their tidal bays, sloughs and estuaries between the Golden Gate Bridge and Carquinez Bridge.

(B) Dungeness crab may not be taken from or possessed if taken from ocean waters, including bays and estuaries, north of the Ventura/Santa Barbara County line where the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, has determined that Dungeness crab contain unhealthy domoic acid levels and recommends closing the fishery until such time as the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, determines that domoic acid levels in Dungeness crab no longer pose a significant risk to public health and no longer recommends the fishery be closed. Areas may be opened on a county-by-county basis. The department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person prior to taking Dungeness crab to call (831) 649-2883 or go to the department's website at www.wildlife.ca.gov/Fishing/Ocean/Health-Advisories to obtain the current status of any ocean water.

(2) Open season:

(A) Del Norte, Humboldt and Mendocino counties: ~~From the first Saturday in November~~ opening date determined though subsection (a)(1)(B) through July 30.

(B) All other counties: ~~From the first Saturday in November~~ opening date determined though subsection (a)(1)(B) through June 30.

(3) Limit: Ten, except in Sonoma, Marin, San Francisco, San Mateo, Santa Cruz, and Monterey counties, when fishing aboard a commercial passenger fishing vessel required to be licensed pursuant to Section 7881 and/or Section 7920, Fish and Game Code, the limit is six.

(4) Not more than 60 crab traps are authorized to be used to take Dungeness crab from a vessel operating under authority of a Commercial Passenger Fishing Vessel License issued pursuant to Fish and Game Code Section 7920.

(5) Traps and trap buoys by a commercial passenger fishing vessel to take Dungeness crab under authority of this Section and Section 29.80 shall have the commercial boat registration number of that vessel affixed to each trap and buoy.

(6) No vessel that takes Dungeness crabs under authority of this section, or Section 29.80, shall be used to take Dungeness crabs for commercial purposes.

(7) Minimum size: Five and three-quarter inches measured by the shortest distance through the body from edge of shell to edge of shell directly in front of and excluding the points (lateral spines); except in Sonoma, Marin, San Francisco, San Mateo, Santa Cruz, and Monterey counties, when fishing aboard a commercial passenger fishing vessel required to be licensed pursuant to Section

7881 and/or Section 7920, Fish and Game Code, the minimum size is six inches measured by the shortest distance through the body from edge of shell to edge of shell directly in front of and excluding the points (lateral spines).

- (b) All crabs of the *Cancer* genus except Dungeness crabs, but including: yellow crabs, rock crabs, red crabs and slender crabs:

(1) Rock crab closure:

(A) Rock crab may not be taken from or possessed if taken from ocean waters, including bays and estuaries, north of the Ventura/Santa Barbara County line where the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, has determined that rock crab contain unhealthy domoic acid levels and recommends closing the fishery until such time as the Director of the Office of Environmental Health Hazard Assessment, in consultation with the Director of the California Department of Public Health, determines that domoic acid levels in rock crab no longer pose a significant risk to public health and no longer recommends the fishery be closed. Areas may be opened on a county-by-county basis. The department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person prior to taking rock crab to call (831) 649-2883 or go to the department's website at www.wildlife.ca.gov/Fishing/Ocean/Health-Advisories to obtain the current status of any ocean water.

~~(1)~~(2) Open season:

(A) Rock crab: The rock crab season will open on the date determined through subsection (b)(1)(A) and will remain open until [OAL to insert end date of emergency regulation].

(B) All other species: All year.

~~(2)~~(3) Limit: Thirty-five.

~~(3)~~(4) Minimum size: Four inches measured by the shortest distance through the body, from edge of shell to edge of shell at the widest part, except there is no minimum size in Fish and Game districts 8 and 9.

- (c) All crabs of the genus *Cancer*, including Dungeness crabs, yellow crabs, rock crabs, red crabs and slender crabs, may be brought to the surface of the water for measuring, but no undersize crabs may be placed in any type of receiver, kept on the person or retained in any person's possession or under his direct control; all crabs shall be measured immediately and any undersize crabs shall be released immediately into the water.

- (d) Sand crabs (*Emerita analoga*): Limit: Fifty.

Note: Authority cited: Sections 200, 202, ~~205 and 220~~205, 220 and 240, Fish and Game Code; Reference: Sections 200, 202, 205, ~~206 and 220~~206, 220 and 240, Fish and Game Code

CALIFORNIA FISH AND GAME COMMISSION
STATEMENT OF PROPOSED EMERGENCY REGULATORY ACTION
FOR RE-ADOPTION OF EMERGENCY REGULATIONS

Emergency Action to Re-adopt Section 29.85,
Title 14, California Code of Regulations
Re: Re-adoption of Dungeness and rock crab fisheries
due to elevated levels of domoic acid

I. Statement of Facts Constituting Need for Emergency Regulatory Action

The California Fish and Game Commission (Commission) submitted an emergency rulemaking that was filed by the Office of Administrative Law (OAL) on November 5, 2015, after samples of Dungeness and rock crabs were found to contain high domoic acid levels. The emergency rulemaking closed the recreational rock crab fishery north of the Ventura/Santa Barbara county line and delayed the opening of the recreational Dungeness crab fishery statewide.

The Office of Environmental Health Hazard Assessment (OEHHA), in cooperation with the California Department of Fish and Wildlife (Department), has continued to regularly monitor domoic acid levels in rock crab and Dungeness crab along the California coast since the emergency regulations were filed. Pursuant to the emergency regulations adopted in November 2015, the following state waters have been reopened for recreational fishing based on the recommendations of OEHHA in consultation with the director of the California Department of Public Health (CDPH):

1. On December 31, 2015, the recreational Dungeness crab and rock crab fisheries were reopened in state waters south of 35° 40' N. Latitude (near Piedras Blancas Light Station).
2. On February 11, 2016, the recreational Dungeness crab fishery was reopened in state waters south of 38° 00' N. Latitude (near Point Reyes).
3. On March 18, 2016, the recreational Dungeness crab fishery was reopened in state waters south of the Mendocino/Sonoma county line (near Gualala).
4. On March 28, 2016, the recreational rock crab fishery were reopened in the Channel Islands, with the exception of state waters between Santa Cruz and Santa Rosa islands.

Past history with such situations suggested that the emergency would resolve itself within the original 180 days as domoic acid levels naturally subsided. However, high domoic acid levels are persisting in some areas of the state as indicated by ongoing Dungeness crab and rock crab sampling. Emergency closures for recreational fishing remain in effect for rock crab north of the Piedras Blancas Light Station in San Luis Obispo County and for Dungeness crab north of the Sonoma/Mendocino county line. Therefore, the Commission re-adopted the emergency regulations for a period of 90 days following the initial 180-day effective time period, which ends on May 3. The re-adoption is necessary to

continue the emergency closures in those ocean waters of the state with persistently high levels of domoic acid.

Consuming crab from these areas poses a significant risk to public health as determined by the Director of OEHHA, in consultation with the Director of CDPH. Thus readopting the emergency closure for a period of 90 days beyond the initial 180-day period is necessary for the preservation of public health and safety.

Identification of Reports or Documents Supporting Factual Emergency

The Commission relied on the following documents in proposing this emergency rulemaking action:

- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Sonke Mastrup, Executive Director, California Fish and Game Commission, *Recommendations on Opening Dungeness and Rock Crab From Mainland Coasts of San Luis Obispo County and Counties to the South*, December 31, 2015.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation Regarding Opening of Dungeness Crab Fishery in State Waters South of 38° 00' N Latitude*, February 11, 2016.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on Opening of Dungeness Crab Fishery in State Waters South of the Sonoma/Mendocino County Line*, March 18, 2016.
- Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director, California Department of Fish and Wildlife, and Michael Yaun, Interim Executive Director, California Fish and Game Commission, *Recommendation on Opening Rock Crab Fishery near Channel Islands, with the Exception of One Area*, March 28, 2016.

II. Regulatory Proposal

In response to the high domoic acid levels persisting in some areas of state ocean waters as indicated by continued Dungeness crab and rock crab sampling, the Commission re-adopted the emergency closure for a period of 90 days beyond the initial 180-day period as it is necessary for the preservation of the public health and safety.

Emergency recreational fishing closures would remain in effect for Dungeness crab north of the Sonoma/Mendocino county line near Gualala in Mendocino County, for rock crab north of the Piedras Blancas Light Station in San Luis Obispo County, and for rock crab in ocean waters of the state between Santa

Cruz and Santa Rosa islands within the area bounded by straight lines between the following points in the order listed:

- 34° 7.75' N lat. 120° 0.00' W long.,
- 34° 7.75' N lat. 119° 50.00' W long.,
- 33° 53.00' N lat. 119° 50.00' W long.,
- 33° 53.00' N lat. 120° 0.00' W long., and
- 34° 7.75' N lat. 120° 0.00' W long.,

Closure of the recreational fisheries shall remain in effect until the director of OEHHA, in consultation with the director of CDPH, determines that domoic acid levels in Dungeness crab no longer pose a significant risk to public health and no longer recommends the fishery be closed.

The Department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person taking Dungeness or rock crab to call the Department's hotline or visit the Department's website to obtain the current status of any ocean water.

III. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

- (a) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

None.

- (b) Nondiscretionary Costs/Savings to Local Agencies:

None.

- (c) Programs Mandated on Local Agencies or School Districts:

None.

- (d) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code:

None.

- (e) Effect on Housing Costs:

None.

IV. Re-adoption Criteria

Pursuant to Government Code Section 11346.1(h), the text of a re-adopted regulation must be the “same or substantially equivalent” to the text of the original emergency regulation. The language for the re-adopted regulatory amendment is substantially equivalent to the language of the original emergency regulation.

In addition, Government Code Section 11346.1(h) specifies that the emergency rulemaking agency must demonstrate that it is making “substantial progress and has proceeded with due diligence” to comply with standard rulemaking provisions. At its April 13, 2016 meeting, the Commission received an update on testing and sampling levels and an overview of state ocean waters that have been reopened as well as those that remain closed due to elevated levels of domoic acid. Past history with such situations suggested that the emergency would resolve itself within the original 180 days as domoic acid levels naturally subsided. However, the Commission determined that an emergency situation still exists and re-adopted the emergency closure for a period of 90 days beyond the initial 180-day period as it is necessary for the preservation of public health and safety. Given this unique situation, a state interagency task force that includes the Commission has been created to proactively address harmful algal blooms that result in high levels of domoic acid and to identify solutions for more quickly addressing public health and safety.

V. Authority and Reference

The Commission proposes this emergency action pursuant to the authority vested by sections 200, 202, 205, 220, and 240 of the Fish and Game Code and to implement, interpret, or make specific sections 200, 202, 205, 206, 220, and 240 of said code.

VI. Section 240 Finding

Pursuant to Section 240 of the Fish and Game Code, the Commission finds that the adoption of this regulation is necessary for the immediate protection of public health and safety from elevated levels of domoic acid detected in samples of Dungeness and rock crab in ocean waters of the state.

Informative Digest (Plain English Overview)

The California Fish and Game Commission (Commission) submitted an emergency rulemaking that was filed by the Office of Administrative Law (OAL) on November 5, 2015, after samples of Dungeness and rock crab were found to contain high domoic acid levels. The emergency rulemaking closed the recreational rock crab fishery north of the Ventura/Santa Barbara county line and delayed the opening of the recreational Dungeness crab fishery statewide.

The Office of Environmental Health Hazard Assessment (OEHHA), in cooperation with the California Department of Fish and Wildlife (Department), has continued to regularly monitor domoic acid levels in rock crab and Dungeness crab since the emergency regulations were filed. Pursuant to the emergency regulations adopted in November 2015, the following state waters have been reopened for recreational fishing based on the recommendations of OEHHA in consultation with the director of the California Department of Public Health (CDPH):

1. On December 31, 2015, the recreational Dungeness crab and rock crab fisheries were reopened in state waters south of 35° 40' N. Latitude (near Piedras Blancas Light Station).
2. On February 11, 2016, the recreational Dungeness crab fishery was reopened in state waters south of 38° 00' N. Latitude (near Point Reyes).
3. On March 18, 2016, the recreational Dungeness crab fishery was reopened in state waters south of the Mendocino/Sonoma county line (near Gualala).
4. On March 28, 2016, the recreational rock crab fishery were reopened in the Channel Islands, with the exception of state waters between Santa Cruz and Santa Rosa islands.

High domoic acid levels are persisting in some areas of the state as indicated by continued Dungeness crab and rock crab sampling. Emergency closures for recreational fishing remain in effect for rock crab north of the Piedras Blancas Light Station in San Luis Obispo County and for Dungeness crab north of the Sonoma/Mendocino county line.

Consuming crab from these areas poses a significant risk to public health as determined by the Director of OEHHA, in consultation with the Director of CDPH. Thus readopting the emergency closure for a period of 90 days beyond the initial 180-day period is necessary for the preservation of the public health and safety.

Regulatory Action: The Commission re-adopted the emergency regulations for a period of 90 days following the initial 180-day effective time period, which ends on May 3. The re-adoption is necessary to continue the emergency closures in those state ocean waters with persistently high levels of domoic acid as it is necessary for preserving public health and safety.

The Department shall maintain a list of closed ocean waters of the state and update that list on Wednesday of each week by 1:00 pm. It shall be the responsibility of any person

taking Dungeness or rock crab to call the Department's hotline or visit to the Department's website to obtain the current status of any ocean water.

Benefits: The regulation will protect public health and safety by prohibiting possession of Dungeness and rock crab containing elevated levels of domoic acid.

The adopted regulations are neither inconsistent nor incompatible with existing state regulations. The Legislature has delegated authority to the Commission to promulgate sport fishing regulations (sections 200, 202, 205, 220, and 240, Fish and Game Code).

SUMMARY OF DOMOIC ACID LEVELS IN CRABS

JUNE 23, 2016

PORT	SAMPLE COLLECTION DATE(S) (Dangerous crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Crescent City	9/23/15	6	<2.5-120 ppm	37 ppm	66%
	10/29/15	6	28-140 ppm	66 ppm	91%
	11/18/15	9	<2.5-91 ppm	40 ppm	44%
	12/1/15	10	10-69 ppm	34 ppm	40%
	12/16/15	9	9.8-39 ppm	22.7 ppm	22%
	12/30/15 (Crescent City North)	6	8.6-25 ppm	17 ppm	0%
	12/30/15 (Crescent City South)	6	15-31 ppm	23 ppm	17%
	1/10/16 (Crescent City North)	6	4.9-49 ppm	22 ppm	17%
	1/10/16 (Crescent City South)	6	12-59 ppm	32 ppm	33%
	1/24/16 (Crescent City South)	6	16-35 ppm	24 ppm	33%
	1/24/16 (Crescent City North)	6	4.9-25 ppm	14 ppm	0%
	2/1/16 (Crescent City South)	6	<2.5-17 ppm	10 ppm	0%
	2/1/16 (Crescent City North)	6	<2.5-21 ppm	8 ppm	0%
	2/7/16 (Crescent City South)	6	3.9-14 ppm	9 ppm	0%
	Trinidad	09/11/15	6	23-140 ppm	95 ppm
10/26/15		8	39-97 ppm	66 ppm	100%
11/17/15		15	17-65 ppm	36 ppm	60%
12/16/15		6	8.4-37 ppm	17.5 ppm	17%
12/26/15 (Trinidad North)		6	<2.5-49 ppm	20.2 ppm	17%
12/26/15 (Trinidad South)		6	7.4-38 ppm	19.4 ppm	17%
1/23/16 (Trinidad North)		6	<2.5-31 ppm	13 ppm	17%
1/23/16 (Trinidad South)		6	8.5-29 ppm	17 ppm	0%
2/2/16 (Trinidad North)		6	15-48 ppm	28 ppm	33%
2/2/16 (Trinidad South)		6	4.9-25 ppm	16 ppm	0%
2/11/16 (Trinidad North)		6	6.8-34 ppm	24 ppm	50%
2/11/16 (Trinidad South)		6	8.5-36 ppm	21 ppm	33%
2/20/16 (Trinidad North)		6	7-25 ppm	15 ppm	0%
2/20/16 (Trinidad South)		6	9.9-30 ppm	17 ppm	17%
2/29/16 (Trinidad North)		6	2.8-82 ppm	30 ppm	33%
2/29/16 (Trinidad South)		6	<2.5-56 ppm	24 ppm	33%
3/17/16 (Trinidad North)		6	6.4-35 ppm	16 ppm	17%
3/17/16 (Trinidad South)		6	<2.5-41 ppm	14 ppm	17%
3/24/16 (Trinidad North)		6	2.8-28 ppm	11 ppm	0%
3/24/16 (Trinidad South)		6	7.9-40 ppm	17 ppm	17%
4/1/16 (Trinidad North)		6	6.4-27 ppm	13 ppm	0%
4/1/16 (Trinidad South)		6	5.8-16 ppm	10 ppm	0%
4/9/16 (Trinidad South)		6	5.6 - 58 ppm	16 ppm	17%
4/18/16 (Trinidad South)		6	2.9-20 ppm	11 ppm	0%
4/24/16 (Trinidad South)		6	7.9-54 ppm	20 ppm	17%
5/1/16 (Trinidad South)		6	9.9-25 ppm	18 ppm	0%
5/8/16 (Trinidad South)		6	6.1-38 ppm	16 ppm	17%
5/15/16 (Trinidad South)		6	<2.5-14 ppm	6 ppm	0%

PORT	SAMPLE COLLECTION DATE(S) (Dungeness crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Eureka	09/15/15	6	30-120 ppm	76 ppm	100%
	10/27/15	12	37-140 ppm	67 ppm	100%
	11/23/15 (Samoa)	6	13-53 ppm	36.5 ppm	83%
	11/23/15 (Eel River)	6	13-59 ppm	34.6 ppm	50%
	12/16/15 (Eel River)	6	29-54 ppm	38.2 ppm	50%
	12/16/15 (Samoa)	6	12-63 ppm	24.7 ppm	17%
	12/30/15 (Eel River)	6	16-40 ppm	31 ppm	67%
	12/30/15 (Samoa)	6	3.7-33 ppm	17.8 ppm	17%
	1/21/16 (Eel River)	6	13-29 ppm	22.2 ppm	0%
	1/21/16 (Samoa)	6	<2.5-12 ppm	7.9 ppm	0%
	2/2/16 (Samoa)	6	8.7-27 ppm	14 ppm	0%
	2/2/16 (Eel River)	6	15-27 ppm	21 ppm	0%
	4/24/16 (Rock Crab-Humboldt Bay)	6	<2.5-71 ppm	12 ppm	17%
	Fort Bragg	10/30/15	6	<2.5-15 ppm	6.5 ppm
11/22/15		6	46-270 ppm	118 ppm	100%
11/23/15		6	20-150 ppm	61.5 ppm	66%
12/16/15		6	8.2-37 ppm	20.2 ppm	17%
12/27/15 (Pt. Arena/Manchester)		6	15-39 ppm	26.8 ppm	33%
12/30/15 (Usal)		6	7.8-64 ppm	28 ppm	33%
1/25/16 (Usal)		6	13-81 ppm	45 ppm	67%
1/26/16 (Pt. Arena/Manchester)		6	4.7-57 ppm	28.6 ppm	50%
2/2/16 (Usal)		6	11-41 ppm	27 ppm	50%
2/10/16 (Usal)		6	9.6-71 ppm	30 ppm	33%
2/10/16 (Pt. Arena/Manchester)		6	9.4-93 ppm	35 ppm	33%
2/16/16 (Usal)		6	7.7-83 ppm	31 ppm	33%
2/21/16 (Pt. Arena/Manchester)		6	8-85 ppm	33 ppm	50%
2/23/16 (Usal)		6	12-55 ppm	29 ppm	50%
3/17/16 (Pt. Arena/Manchester)		6	9.4-28 ppm	17 ppm	0%
3/18/16 (Usal)		6	8.9-25 ppm	19 ppm	0%
3/26/16 (Usal)		6	3.6-39 ppm	18 ppm	33%
3/31/16 (Pt. Arena/Manchester)		6	4.8-28 ppm	19 ppm	0%
4/10/16 (Usal)		6	<2.5-13 ppm	8 ppm	0%
4/17/2016 (Ten Mile)		6	6.5-30 ppm	17 ppm	0%
4/17/16 (Shelter Cove)	6	2.9-27 ppm	11 ppm	0%	
4/17/16 (Usal)	6	5.4-28 ppm	13 ppm	0%	

PORT	SAMPLE COLLECTION DATE(S) (Dungeness crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Bodega Bay	10/20/15	6	21-40 ppm	30 ppm	50%
	10/31 - 11/1/15	6	28-91 ppm	45 ppm	83%
	11/16/15 (Point Reyes)	6	14-81 ppm	51 ppm	66%
	11/16/15 (Russian River)	6	11-34 ppm	25.8 ppm	50%
	12/1/15 (Russian River)	6	6-69 ppm	22 ppm	17%
	12/1/15 (Point Reyes)	6	<2.5-40 ppm	15 ppm	17%
	12/8/15 (Russian River)	6	6.5-100 ppm	43.6 ppm	83%
	12/8/15 (Point Reyes)	6	9.6-27 ppm	16.4 ppm	0%
	12/17/15 (Russian River)	6	7-38 ppm	17.5 ppm	17%
	12/17/15 (Point Reyes)	5	<2.5-20 ppm	10.4 ppm	0%
	12/17/15 (Bodega Bay)	6	18-120 ppm	47.7 ppm	67%
	12/27/15 (Bodega Bay)	6	<2.5-54 ppm	20 ppm	17%
	12/30/15 (Russian River)	6	3.1-30 ppm	13.4 ppm	17%
	12/30/15 (Salt Point)	6	11-29 ppm	20.8 ppm	0%
	1/25/16 (Bodega Bay)	6	<2.5-19 ppm	8 ppm	0%
	1/25/16 (Russian River)	6	3.6-13 ppm	9 ppm	0%
	1/25/16 (Salt Point)	6	<2.5-34 ppm	19 ppm	33%
	2/6/16 (Bodega Bay)	6	7.6-34 ppm	17 ppm	33%
	2/6/16 (Russian River)	6	3.9-66 ppm	26 ppm	33%
	2/6/16 (Salt Point)	6	3.7-24 ppm	11 ppm	0%
	2/20/16 (Bodega Bay)	6	<2.5-15 ppm	5 ppm	0%
	2/20/16 (Russian River)	6	4.1-35 ppm	11 ppm	17%
	2/20/16 (Salt Point)	6	5-24 ppm	11 ppm	0%
	2/27/16 (Bodega Bay)	6	<2.5-7 ppm	2 ppm	0%
	2/27/16 (Russian River)	6	<2.5-27 ppm	6 ppm	0%
	3/8/16 (Russian River)	6	8.1-38 ppm	20 ppm	17%
	3/10/16 (Sonoma / Mendocino Co. Line - Block 408)	6	4.5-14 ppm	10 ppm	0%
	3/16/16 (Russian River)	6	<2.5-28 ppm	10 ppm	0%
	4/26/16 (Rock Crab-Bodega Bay)	5	3.3-160 ppm	84 ppm	80%
	5/3/16 (Rock Crab-Bodega Bay)	6	10-87 ppm	30 ppm	17%
	6/7/16 (Rock Crab-Bodega Bay)	6	8.1-160 ppm	42 ppm	33%

PORT	SAMPLE COLLECTION DATE(S) (Dungeness crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Half Moon Bay/SF	10/26/15	12	16-130 ppm	56 ppm	83%
	11/16/15 (HMB)	6	<2.5-22 ppm	11 ppm	0%
	11/16/15 (SF)	6	<2.5-21 ppm	10.7 ppm	0%
	12/1/15 (SF)	6	<2.5-19 ppm	8.8 ppm	0%
	12/1/15 (HMB)	10	<2.5-39 ppm	8.9 ppm	10%
	12/8/15 (HMB)	9	<2.5-49 ppm	20.7 ppm	33%
	12/15/15 (HMB South)	17	<2.5-130 ppm	33.0 ppm	53%
	12/27/15 (HMB North)	6	<2.5-29 ppm	9 ppm	0%
	12/27/15 (SF South)	6	6.2-25 ppm	17 ppm	0%
	1/10/16 (HMB North)	7	6.2-54 ppm	20 ppm	14%
	1/15/16 (HMB South)	6	<2.5-25 ppm	10 ppm	0%
	1/25/16 (SF South)	6	<2.5-23 ppm	12 ppm	0%
	1/25/16 (HMB North)	6	<2.5-18 ppm	4 ppm	0%
	1/25/16 (HMB South)	6	<2.5-24 ppm	5 ppm	0%
	2/6/16 (HMB North)	6	<2.5-11 ppm	5 ppm	0%
	4/23/16 (Rock Crab-HMB)	6	<2.5-16 ppm	5 ppm	0%
	5/6/16 (Rock Crab-HMB)	6	2.5-45 ppm	13 ppm	17%
	5/21/16 (Rock Crab-Pigeon Point)	6	2.6-16 ppm	7 ppm	0%
	5/21/16 (Rock Crab-Pillar Point)	12	<2.5-50 ppm	11 ppm	8%
	6/11/16 (Rock Crab-Pigeon Point)	6	5.4-23 ppm	12 ppm	0%
	6/11/16 (Rock Crab-Pillar Point)	6	<2.5-43 ppm	21 ppm	33%
6/17/16 (Rock Crab-Pillar Point)	12	<2.5-48 ppm	12 ppm	8%	
Monterey	9/16/15 (Red Rock Crab)	4	16-86 ppm	45 ppm	75%
	9/16/15 (Yellow Rock Crab)	1	190 ppm	190 ppm	100%
	9/16/15 (Dungeness)	2	6.8-74 ppm	40 ppm	50%
	10/31-11/1/15 (Dungeness)	11	<2.5-83 ppm	17 ppm	9%
	11/12/15 (Dungeness)	7	9.7-50 ppm	21 ppm	14%
	11/12/15 (Rock Crab)	6	7.9-94 ppm	41 ppm	50%
	11/29/15 (Dungeness)	6	3.6-11 ppm	7 ppm	0%
	12/2/15 (Rock Crab)	8	3.4-100 ppm	23.7 ppm	12.5%
	12/6/15 (Dungeness)	6	<2.5-10 ppm	5 ppm	0%
	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%
	1/12/16 (Dungeness)	6	<2.5-3.8 ppm	1.1 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%	
Morro Bay	10/28/15 (Dungeness)	1	10 ppm	10 ppm	0%
	10/28/15 (Sheep Crab)	5	<2.5-3.9 ppm	3 ppm	0%
	10/28/15 (Red Rock Crab)	5	3.0-12 ppm	6 ppm	0%
	11/16/15 (Dungeness)	5	<2.5-9 ppm	5.7 ppm	0%
	11/16/15 (Rock Crab)	5	<2.5-4.5 ppm	0.9 ppm	0%
	11/16/15 (Spider Crab)	2	<2.5 ppm	Non-detectable	0%
	11/21/15 (Dungeness)	6	<2.5-8.1 ppm	2.6 ppm	0%
11/21/15 (Rock Crab)	5	<2.5-7.7 ppm	3.7 ppm	0%	

PORT	SAMPLE COLLECTION DATE(S) (Dungeness crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Santa Barbara	11/3/15 (Rock Crab)	6	<2.5-64 ppm	36 ppm	50%
	11/1/15 (Rock Crab-South Side Santa Rosa Island; Block #711)	6	<2.5-10 ppm	4 ppm	0%
	11/4/15 (Rock Crab-Coast; Block #656)	6	<2.5-240 ppm	49.5 ppm	17%
	11/6/15 (Rock Crab-North Side San Miguel Island; Block #690)	7	<2.5-110 ppm	38 ppm	29%
	11/13/15 (Rock Crab-North Side San Miguel Island; Block #690)	6	<2.5-170 ppm	53.5 ppm	50%
	11/11/15 (Rock Crab-Block #710)	6	<2.5-160 ppm	36 ppm	16%
	11/11/15 (Rock Crab-North Side Santa Cruz Island; Block #687)	6	<2.5-130 ppm	36 ppm	33%
	11/22/15 (Rock Crab- South Side Santa Rosa Island; Block #711)	6	<2.5-10 ppm	1.7 ppm	0%
	11/22/15 (Rock Crab-North Side Santa Cruz Island; Block #686)	6	<2.5-8.4 ppm	4.3 ppm	0%
	11/23/15 (Rock Crab-North Side San Miguel Island; Block #690)	6	4.2-1,000 ppm	235 ppm	33%
	11/23/15 (Rock Crab-Coast; Block #656)	6	<2.5-3.6 ppm	0.6 ppm	0%
	12/2/15 (Rock Crab-Coast; Block #656)	6	<2.5-14 ppm	6 ppm	0%
	12/2/15 (Rock Crab-North Side Santa Cruz Island; Block #687)	6	4.5-190 ppm	79 ppm	50%
	12/2/15 (Rock Crab-South Side Santa Rosa Island; Block #711)	6	3-120 ppm	36 ppm	50%
	12/3/15 (Rock Crab-North Side San Miguel Island; Block #690)	6	<2.5-93 ppm	46 ppm	50%
	12/9/15 (Rock Crab-North Side San Miguel Island; Block #690)	6	<2.5-4.4 ppm	0.7 ppm	0%
	12/10/15 (Rock Crab-Coast; Block #656)	6	<2.5 ppm	<2.5 ppm	0%
	12/10/15 (Rock Crab-South Side Santa Rosa Island; Block #711)	6	2.8-170 ppm	61 ppm	67%
	12/10/15 (Rock Crab-North Side Santa Cruz Island; Block #687)	6	<2.5-91 ppm	44 ppm	50%
	12/13/15 (Rock Crab-Coast; Block #652)	6	<2.5-150 ppm	36 ppm	33%
	12/14/15 (Rock Crab-Coast; Block #653)	6	<2.5-3.7 ppm	1.5 ppm	0%
	12/13/15 (Rock Crab-Coast; Block #654)	6	<2.5-32 ppm	5.8 ppm	17%
	12/18/15 (Rock Crab-North Side San Miguel Island; Block #690)	7	<2.5-14 ppm	3 ppm	0%
	12/19/15 (Rock Crab-North Side Santa Cruz Island; Block #686)	6	<2.5-210 ppm	39 ppm	17%
	12/19/15 (Rock Crab-North side of San Miguel and Santa Rosa Islands; Block #689)	6	<2.5-8.8 ppm	3 ppm	0%
	12/19/15 (Rock Crab-South Side of Santa Rosa and Santa Cruz Islands; Block #710)	6	<2.5-86 ppm	21 ppm	17%
	12/20/15 (Rock Crab-Coast; Block #652)	6	<2.5-17 ppm	3 ppm	0%

PORT	SAMPLE COLLECTION DATE(S) (Dungeness crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Santa Barbara	12/20/15 (Rock Crab-Coast; Block #653)	6	<2.5-6 ppm	1.6 ppm	0%
	12/20/15 (Rock Crab-Coast; Block #654)	6	<2.5-11 ppm	1.8 ppm	0%
	12/27/15 (Rock Crab-Coast; Block #652)	6	<2.5-29 ppm	6 ppm	0%
	12/27/15 (Rock Crab-Coast; Block #653)	6	Non-detectable	Non-detectable	0%
	12/27/15 (Rock Crab-Coast; Block #654)	6	<2.5-12 ppm	2 ppm	0%
	12/27/15 (Rock Crab-North Side Santa Cruz Island; Block #686)	6	<2.5-8.8 ppm	2 ppm	0%
	12/27/15 (Rock Crab-North side of San Miguel and Santa Rosa Islands; Block #689)	6	<2.5-2.8 ppm	0.5 ppm	0%
	12/27/15 (Rock Crab-North Side San Miguel Island; Block #690)	6	<2.5-24 ppm	9 ppm	0%
	12/27/15 (Rock Crab-South Side of Santa Rosa and Santa Cruz Islands; Block #710)	6	<2.5-8.4 ppm	2 ppm	0%
	1/3/16 (Rock Crab-North Side of Santa Cruz Island; Block #686)	6	<2.5-64 ppm	15.7 ppm	33%
	1/3/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	3.8-120 ppm	43.9 ppm	50%
	1/3/16 (Rock Crab-North Side of San Miguel and Santa Rosa Islands; Block #689)	6	<2.5-130 ppm	33 ppm	33%
	1/3/16 (Rock Crab-North Side of San Miguel Island; Block #690)	6	<2.5-11 ppm	4.6 ppm	0%
	1/3/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Islands; Block #710)	6	<2.5-89 ppm	26.7 ppm	33%
	1/3/16 (Rock Crab-South Side of Santa Rosa Island; Block #711)	6	<2.5-6.9 ppm	2 ppm	0%
	1/10/16 (Rock Crab-North Side of Santa Cruz Island; Block #686)	6	<2.5-6.3 ppm	1.9 ppm	0%
	1/10/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	<2.5-180 ppm	37 ppm	17%
	1/10/16 (Rock Crab-North Side of San Miguel and Santa Rosa Islands; Block #689)	6	<2.5-4.2 ppm	1.3 ppm	0%
	1/10/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	<2.5-460 ppm	99 ppm	33%
	1/10/16 (Rock Crab-South Side of Santa Rosa Island; Block #711)	6	<2.5-6.1 ppm	1.7 ppm	0%
1/17/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	2.8-31 ppm	13 ppm	17%	
1/17/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	<2.5-31 ppm	12 ppm	17%	

PORT	SAMPLE COLLECTION DATE(S) (Dungeness crab unless otherwise specified)	NUMBER OF SAMPLES	RESULTS - RANGE (FDA ACTION LEVEL - 30 PPM)	AVERAGE LEVEL (FDA ACTION LEVEL - 30 PPM)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
Santa Barbara	1/17/16 (Rock Crab-North Side of Santa Cruz Island; Block #686)	6	<2.5-51 ppm	18 ppm	33%
	1/17/16 (Rock Crab-North Side of San Miguel and Santa Rosa Islands; Block #689)	6	<2.5-27 ppm	9 ppm	0%
	1/24/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	<2.5-7.8 ppm	1.3 ppm	0%
	1/24/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	<2.5-3 ppm	0.5 ppm	0%
	1/24/16 (Rock Crab-North Side of Santa Cruz Island; Block #686)	6	<2.5-3.7 ppm	1.6 ppm	0%
	1/31/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	<2.5-89 ppm	15 ppm	17%
	1/31/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	<2.5-23 ppm	6 ppm	0%
	1/31/16 (Rock Crab-North Side of Santa Cruz Island; Block #686)	6	<2.5-13 ppm	4 ppm	0%
	2/7/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	4.7-550 ppm	280 ppm	67%
	2/19/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	Non-detectable	<2.5 ppm	0%
	2/19/16 (Rock Crab-North Side of Santa Cruz Island; Block #686)	6	<2.5-2.8 ppm	<2.5 ppm	0%
	2/19/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	5	Non-detectable	<2.5 ppm	0%
	2/19/16 (Rock Crab-South Side of Santa Rosa Island; Block #711)	6	Non-detectable	<2.5 ppm	0%
	2/25/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	Non-detectable	<2.5 ppm	0%
	3/13/16 (Rock Crab-North Side San Miguel Island; Block #690)	6	<2.5-30 ppm	5 ppm	0%
	3/13/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	Non-detectable	<2.5 ppm	0%
	3/23/16 (Rock Crab-North Side of San Miguel and Santa Rosa Islands; Block #689)	5	<2.5-26 ppm	7 ppm	0%
	3/23/16 (Rock Crab-North Side San Miguel Island; Block #690)	5	<2.5-8.5 ppm	3 ppm	0%
	4/10/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	<2.5-42 ppm	10 ppm	17%
	4/10/16 (Rock Crab-North Side of Santa Cruz Island; Block #687)	6	<2.5-14 ppm	2 ppm	0%
	4/18/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	<2.5-4.9 ppm	1 ppm	0%
	5/1/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	5	<2.5-85 ppm	38 ppm	40%
	5/18/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	Non-detectable	<2.5 ppm	0%
5/25/16 (Rock Crab-South Side of Santa Rosa and Santa Cruz Island; Block #710)	6	<2.5-15 ppm	2.5 ppm	0%	

