November 7, 2016

**FINDING OF EMERGENCY**  
(Gov. Code, § 11346.1, subd. (b); Cal. Code Regs., tit. 1, § 50)

Pursuant to Government Code section 11346.1, subdivision (b), and California Code of Regulations, Title 1, section 50, a state agency may adopt emergency regulations if the agency makes a finding that the adoption of a regulation is necessary to address a situation calling for immediate action to avoid serious harm to the public peace, health, safety, or general welfare.

The California Department of Fish and Wildlife (CDFW) finds that an emergency closure of all take or possession of Dungeness crab under a commercial fishing license from any ocean waters of the state north of Point Reyes, Marin County (38°00’ N. lat.) and all rock crab (rock crab, Cancer antennarius, yellow crab, Cancer anthonyi, and red crab, Cancer productus) under a commercial fishing license from any ocean waters of the state north of Pigeon Point, San Mateo County (37°11’ N. lat.) is necessary due to persistently high domoic acid levels in the viscera (guts) of Dungeness crab or rock crab. Commercial take and marketing of these crab poses a significant risk to public health as determined by the Director of the Office of Environmental Health Hazard Assessment (OEHHA), in consultation with the Director of the California Department of Public Health (CDPH). This emergency closure is necessary for immediate preservation of the public peace, health, safety, or general welfare.

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.

**Specific Facts Demonstrating the Existence of an Emergency and Need for Immediate Action**

Current laws and regulations for commercial take of Dungeness crab and rock crab specify seasons, size limits, closed fishing areas, and gear restrictions. The Dungeness crab season is scheduled to open in certain areas on Tuesday, November 15, 2016 and the rock crab season is currently open year-round.

Domoic acid is produced from some species of the marine diatom Pseudo-nitzschia. Currently, a massive toxic bloom of Pseudo-nitzschia has developed, significantly impacting marine life along California’s coast. State scientists have been testing crab from nine fishing ports from Avila to Crescent City, and have determined that the domoic acid is present at harmful levels in some locations on the fishery grounds. Recent test results have shown persistently elevated levels of domoic acid in Dungeness crab at several test sites within the region requested for closure. The CDPH has determined that domoic acid levels in recent samples have exceeded the State’s
action level in the crabs’ viscera, commonly referred to as crab butter, and therefore pose a significant risk to the public if they are consumed without proper handling.

On November 2, 2016, the CDPH issued a health warning to the public not to consume the viscera of Dungeness crab caught in coastal waters north of Point Reyes, Marin County due to the sporadic detection of elevated levels of domoic acid in the viscera of Dungeness crabs from samples obtained off the northern California coast. The warning was followed by a recommendation on November 7, 2016, from the OEHHA to the CDFW to close or delay the start of the commercial Dungeness crab season north of Point Reyes and to close the commercial rock crab fishery north of Pigeon Point.

Domoic acid is a potent neurotoxin that can accumulate in shellfish, other invertebrates and sometimes fish. It causes illness and sometimes death in a variety of birds and marine mammals that consume affected organisms. At low levels, domoic acid exposure can cause nausea, diarrhea and dizziness in humans. At higher levels, it can cause persistent short-term memory loss, seizures and can in some cases be fatal.

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.

The CDFW proposes this emergency rulemaking action to close the commercial rock crab fishery north of Pigeon Point and keep closed the commercial Dungeness crab fishery north of Point Reyes based on the significant risk to public health that exists due to unhealthy domoic acid levels in Dungeness crab, Metacarcinus magister, and all rock crab (rock crab, Cancer antennarius, yellow crab, Cancer anthonyi, and red crab, Cancer productus) as determined by the Director of the OEHHA, in consultation with the Director of the CDPH, pursuant to the authority vested by Fish and Game Code section 7715.

The Dungeness crab fishery is one of California’s most lucrative and popular fisheries. The fishery has a well-established order and structure between different Districts within the commercial sector. The proposed reopening procedures in these emergency regulations are designed to maintain the existing structure as closely as possible.

**Technical, Theoretical, and/or Empirical Studies, Reports, or Documents Relied Upon**

The Department relied on the following documents in proposing this emergency rulemaking action:
Office of Environmental Health Hazard Assessment, Memorandum to Charlton H. Bonham, Director of the California Department of Fish and Wildlife, Subject: Recommendation on Closure or Delay of Opening of Commercial Dungeness Crab Fishery North of Point Reyes and Closure of Commercial Rock Crab Fishery North of Pigeon Point, November 7, 2016.


Office of Environmental Health Hazard Assessment, Summary of Domoic Acid Levels in Crab, November 5, 2015.

**AUTHORITY AND REFERENCE**

(Gov. Code, § 11346.5, subd. (a)(2))

Authority cited: Sections 7715, Fish and Game Code.

Reference: Sections 7715, 8276, and 8282, Fish and Game Code.

**INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW**

(Gov. Code, § 11346.5, subd. (a)(3))

On November 2, 2016, the CDPH issued a health warning to the public not to consume the viscera of Dungeness crab caught in coastal waters north of Point Reyes, Marin County due to the sporadic detection of elevated levels of domoic acid in the viscera of Dungeness crabs from samples obtained off the northern California coast. The warning was followed by a recommendation on November 7, 2016, from the OEHHA to the CDFW to close or delay the start of the commercial Dungeness crab season north of Point Reyes, Marin County, and to close the commercial rock crab fishery north of Pigeon Point, San Mateo County.

Domoic acid is produced from some species of the marine diatom Pseudo-nitzschia. A massive toxic bloom of Pseudo-nitzschia developed in the summer of 2015, and while it has dissipated in most locations, the biotoxin domoic acid, produced by the diatom, has persisted in the food chain impacting some organisms in certain locations, along California’s coast. State scientists have been testing crab from nine fishing ports from Avila Bay to Crescent City, and have determined that the domoic acid has persisted in crab from specific areas of the fishery grounds. Recent test results have shown persistently elevated levels of domoic acid in a low number of crab samples from
specific areas of California’s coastline. The CDPH has determined that domoic acid levels in recent samples have exceeded the State’s action level for the crabs’ viscera, commonly referred to as crab butter, and therefore pose a significant risk to the public if they are consumed.

Domoic acid is a potent neurotoxin that can accumulate in shellfish, other invertebrates and sometimes fish. It causes illness and sometimes death in a variety of birds and marine mammals that consume affected organisms. At low levels, domoic acid exposure can cause nausea, diarrhea and dizziness in humans. At higher levels, it can cause persistent short-term memory loss, seizures and can in some cases be fatal.

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.

Based on the recommendation from OEHHA, CDFW will act on its authority under Fish and Game Code Section 7715 to keep closed the commercial Dungeness crab season currently scheduled to start Tuesday, November 15. The CDFW action will also close the commercial rock crab fisheries in the affected area.

CDFW, along with the OEHHA and CDPH, has been actively testing crabs since early September. Results from those tests showed that elevated levels of domoic acid are present and the health risk to humans is currently high enough to warrant a health warning. CDFW will continue to coordinate with OEHHA and CDPH to test domoic acid levels in crab along the coast to determine when the fisheries can safely be opened. The CDFW, CDPH, OEHHA, and the Ocean Protection Council are coordinating efforts to monitor toxicity levels and ensure public safety.

The Dungeness crab fishery is one of California’s most lucrative and popular fisheries. The fishery has a well-established order and structure between different Districts within the commercial sector. The proposed reopening procedures in these emergency regulations are designed to maintain the existing structure as closely as possible.

The Proposed Regulation Does Not Differ or Conflict with Federal Law

The proposed regulation does not differ substantially or conflict with an existing comparable federal regulation or statute.

The Proposed Regulation is Not Inconsistent or Incompatible with Existing State Regulations
The Department conducted an evaluation of existing regulations and this regulation is neither inconsistent nor incompatible with existing state regulations.

**Benefits of the Proposed Regulation**

The proposed emergency closure will benefit the general public by reducing a significant risk to public health as determined by the Director of the OEHHA, in consultation with the Director of the CDPH.

**OTHER MATTERS PRESCRIBED BY STATUTE**

(Gov. Code, § 11346.5, subd. (a)(4))

The Department’s operations are primarily prescribed by the hundreds of provisions set forth in the California Fish and Game Code and Title 14, California Code of Regulations. Other bodies of law that govern the Department include, but are not limited to, the Government and Penal Codes.

**LOCAL MANDATE DETERMINATION**

(Gov. Code, § 11346.5, subd. (a)(5))

The Department has determined that adoption of California Code of Regulations, Title 14, section 131 does not impose a new mandate on local agencies or schools districts.

**ESTIMATE OF COST OR SAVINGS**

(Gov. Code, § 11346.5, subd. (a)(6))

This emergency rulemaking will not result in any costs or savings to local agencies or school districts and does not affect federal funding to the state. Estimated costs to the State in terms of reduced landing tax revenues are estimated at $1,050 per week that the season is shortened. There are no nondiscretionary costs or savings imposed on local agencies. There are no costs or savings in federal funding to the State.

**Dungeness Crab Fishery**

The Dungeness crab commercial season is normally November 15 onward to mid-July. Harvest data from five seasons (that had no emergency closures), from 2010-11 to 2014-15 for Dungeness crab landings were compared to the most recent 2015-16 harvest (that had emergency closures) to estimate the potential loss in landings tax receipts that may occur with this emergency action. The average weekly landings tax receipts over an uninterrupted 35-week season varies from highs of $4,414 in the opening month of November; to a low at the end of the season in July of $42; with an average over the entire season of $1,050 per week. The closure is effectively a postponement of the season opening, and in the event that the closure is lifted, the opening season high catch volumes and landings tax receipts are anticipated. While the higher initial tax revenues should be recouped later at the future season opening, the
entire season length would be shortened by the effective closure period resulting in total tax revenue losses of an estimated $1,050 per week that the season is shortened.

Rock Crab Fishery
The rock crab commercial season is open year round. The last five years, 2010-11 to 2014-15 of rock crab landings in the closure area were examined to derive an estimate of the potential loss in landings tax receipts. The average weekly catch and associated landings tax receipts do not vary much throughout the year. The weekly average landings tax revenue is $55 per week. The closure will effectively reduce the annual season length, such that the anticipated annual losses would be incurred at approximately $55 per week. However upon first re-opening the rock crab fishery, the catch volume and landings tax revenue may exceed the average under the normal year round season.

Other Tax Revenues to the State
The total value (including state sales and income tax) of the Dungeness crab harvest was about $60 million in the 2014-15 season as the catch from about 500 commercial vessels is brought to market and passed through to processors, dockworkers, truckers and others. The total value of the crab harvest is estimated to contribute about $6 million in sales and income tax revenue to the state annually. This is approximately $115,400 in sales and income taxes per week.