MEMORANDUM

TO: Charlton H. Bonham, Director
    California Department of Fish and Wildlife
    1416 Ninth Street, 12th Floor
    Sacramento, California 95814

FROM: Lauren Zeise, Ph.D.
    Director

DATE: December 3, 2018

SUBJECT: RECOMMENDATION TO OPEN THE COMMERCIAL DUNGENESS CRAB FISHERY FROM THE SOUTHERN BOUNDARY OF BODEGA HEAD STATE MARINE RESERVE IN SONOMA COUNTY TO THE SONOMA/MENDOCINO COUNTY LINE

The Office of Environmental Health Hazard Assessment (OEHHA), in consultation with the California Department of Public Health (CDPH), has determined that consumption of Dungeness Crab taken from state waters from the southern boundary of Bodega Head State Marine Reserve in Sonoma County (38° 18’ N. latitude) north to the Sonoma/Mendocino County line (38° 46.125’ N. latitude) no longer poses a significant threat for domoic acid exposure. OEHHA, in consultation with CDPH, therefore recommends that the commercial crab fishery be opened in this area. This determination is based on data from samplings of Dungeness crab that were collected from this area and analyzed by CDPH laboratories, as shown in the table below.

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.

Current federal action levels for domoic acid are 20 parts per million (ppm) for all fish, with the exception of 30 ppm in the viscera of Dungeness crabs.

CDPH and OEHHA recommend as a best preparation practice that consumers avoid eating the viscera (internal organs, also known as “butter” or “guts”) because they usually contain much higher levels of domoic acid than the meat.
Dungeness Crab Sampling Results

<table>
<thead>
<tr>
<th>PORT</th>
<th>AREA</th>
<th>SAMPLE COLLECTION DATE</th>
<th>NUMBER OF SAMPLES</th>
<th>TISSUE TYPE</th>
<th>SAMPLE RESULTS: RANGE</th>
<th>AVERAGE LEVEL</th>
<th>SAMPLES EXCEEDING ACTION LEVEL*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>Reyes</td>
<td>9/28/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 19 ppm</td>
<td>5 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Bodega</td>
<td>Head</td>
<td>9/28/2018</td>
<td>6</td>
<td>Viscera</td>
<td>5.8 - 40 ppm</td>
<td>17.3 ppm</td>
<td>17%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>9/29/2018</td>
<td>6</td>
<td>Viscera</td>
<td>6.8 - 32 ppm</td>
<td>16.7 ppm</td>
<td>33%</td>
</tr>
<tr>
<td>Salt</td>
<td>Point</td>
<td>9/29/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 15 ppm</td>
<td>4 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Bodega</td>
<td>Head</td>
<td>10/20/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 31 ppm</td>
<td>11.9 ppm</td>
<td>17%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>10/20/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 14 ppm</td>
<td>4.9 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Bodega</td>
<td>Head</td>
<td>10/27/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 30 ppm</td>
<td>11.4 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>10/27/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 74 ppm</td>
<td>17.1 ppm</td>
<td>17%</td>
</tr>
<tr>
<td>Bodega</td>
<td>Head</td>
<td>11/3/2018</td>
<td>6</td>
<td>Viscera</td>
<td>3.1 - 14 ppm</td>
<td>6 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>11/3/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 14 ppm</td>
<td>3.4 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>11/10/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 52 ppm</td>
<td>14.6 ppm</td>
<td>17%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>11/17/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 8.7 ppm</td>
<td>1.5 ppm</td>
<td>0%</td>
</tr>
<tr>
<td>Russian</td>
<td>River</td>
<td>11/25/2018</td>
<td>6</td>
<td>Viscera</td>
<td>&lt; 2.5 - 10 ppm</td>
<td>4.5 ppm</td>
<td>0%</td>
</tr>
</tbody>
</table>

*The action level for viscera is 30 ppm.