Analysis

Item 55: Department of Agriculture

Cyanotoxin Research in Food Processing

Analyst: John Terpening

Request: Allocate $730,295 from the Emergency Fund to purchase laboratory equipment and conduct research and development on a potential test for the presence of cyanotoxins in manufactured food products.

Analysis: In late May 2018, cyanotoxins were detected in Salem's drinking water. As a result, several local food manufacturers that use Salem's drinking water in their food processing operations contacted the Oregon Department of Agriculture's (ODA) Food Safety Program for a potential test of cyanotoxins in manufactured food. Currently, no such test for cyanotoxins in manufactured food exists.

The funding request from the Department includes a limited duration position and dedicated analytical lab equipment to conduct research and develop an approved test. ODA notes that $450,000 of the requested amount would be used for the dedicated lab equipment, and once a method is developed, the Regulatory Lab would use existing staff and the equipment to conduct the tests on a fee-for-service basis to manufactured food processors. The Department anticipates that the limited duration position would need to continue full-time in the 2019-21 biennium as the research and testing methods are developed at an estimated cost of $375,802 General Fund.

As mentioned above, the risks of cyanotoxins in manufactured food has not been fully researched. The Federal Food and Drug Administration has stated that it would not take regulatory action related to water used for food processing solely based upon a drinking water health advisory for cyanobacterial toxins. The Legislative Fiscal Office does not believe the request rises to the level of an emergency requiring immediate funding from the Emergency Board, given that the risk of cyanotoxin contamination occurring in 2018 is decreasing as average daily temperatures decrease, and there has been no evidence to-date of foodborne illness from cyanotoxins in manufactured food. Rather, this request should be given a more thorough discussion within the context of the legislative budget review process that will occur during the 2019 legislative session.

Legislative Fiscal Office Recommendation: Defer consideration of the request until the 2019 legislative session as part of the larger discussion of all funding requests from the agency, including a potential fee structure for food producers to pay for the proposed food safety certification process.

Request: Allocate $730,295 from the State Emergency Fund for one limited duration, full-time Chemist 3 position (0.38 FTE) to research and develop a cyanotoxins testing process, new analytical equipment dedicated to cyanotoxins testing, and Services and Supplies necessary to support the Chemist 3 position and the associated research and method development.

Recommendation: Approve the request.

Discussion: Harmful Algal Blooms have received increased attention in the last year. State agencies, municipalities, non-profit organizations, and community partners have joined together to collaborate on ways to protect public health from cyanotoxin risks. The Oregon Department of Agriculture has a Regulatory Laboratory providing most of the chemistry and microbiology testing services for the Department's regulatory programs, including the Food Safety Program. The Food Safety Program is responsible for ensuring food safety by regulating and licensing food producers and retailers, excluding restaurants.

Recent events involving the discovery of cyanotoxins in Salem's drinking water generated a large number of inquiries from food producers seeking ways to test their food products to ensure their products were safe for consumption. In the event of unsafe products, food producers wanted justification for filing an insurance loss claim. Currently, there is not an approved method for testing cyanotoxins in food products or defined regulatory limits. The Oregon Health Authority will begin requiring routine testing of drinking water systems in Oregon. Given the increased level of testing, more cyanotoxin contamination will likely be discovered, generating more requests from food processors asking to have their products tested.

The Department's Regulatory Laboratory does not currently have capacity to implement the research and testing needed to create an approved cyanotoxin testing process for manufactured food products. Preliminary research indicates scientists in England have found an effective method to test for cyanotoxins in fish and shellfish with the possibility of expanding to food testing. The funding requested above would enable the agency to use existing research to develop an approved method for testing cyanotoxins in manufactured food products.

The Department's $730,295 General Fund request includes funding for one full-time, limited duration Chemist 3 position (0.38 FTE) at $87,582, Services and Supplies of $192,713 and Capital Outlay expenses of $450,000. If approved, the estimated fiscal impact in the 2019-2021 biennium for program continuation would be $375,802, which includes $253,065 for Personal Services and $122,737 for Services and Supplies.

Legal Reference: Allocation of $730,295 from the State Emergency Fund to supplement the appropriation made by chapter 562, section 1(2), Oregon Laws 2017, for the Oregon Department of Agriculture, Food Safety/Consumer Protection Policy Area for the 2017-2019 biennium.

Oregon
Kate Brown, Governor

Department of Agriculture
635 Capitol St NE
Salem, OR 97301-2532

August 28, 2018

REPLACEMENT LETTER

The Honorable Senator Peter Courtney, Co-Chair
The Honorable Representative Tina Kotek, Co-Chair
State Emergency Board
900 Court Street NE
H-178 State Capitol
Salem, OR 97301-4048

Dear Co-Chairpersons:

Nature of the Request
The Oregon Department of Agriculture (ODA) requests permission to appear before the September meeting of the Emergency Board for the purpose of securing emergency funding for an increase in its Regulatory Laboratory capacity specific to the research, method development and implementation of a new test for the presence of cyanotoxins (water contaminant) in manufactured food products.

Agency Action/Background
Recent detections of cyanotoxins in drinking water caused by Harmful Algal Blooms (HABs) have raised health concerns across the state. The Oregon Health Authority (OHA), Department of Environmental Quality (DEQ), Oregon Department of Agriculture (ODA), Oregon Emergency Management (OEM), Oregon Military Department, municipalities, nonprofit organizations and community partners are working together to protect public health from the risks posed by cyanotoxins.

The ODA's Regulatory Laboratory provides the majority of the chemistry and microbiology testing services for ODA's regulatory enforcement programs (pesticides, CAFO, fertilizer) including the Food Safety Program (manufactured food, retail, dairy, meats, shellfish). Testing specific to Food Safety includes monitoring of the food supply, compliant investigations, or event/emergency response.

The mission of ODA's Food Safety Program (FSP) is to educate, collaborate with and regulate Oregon's food industries to prevent unhealthy or unsafe conditions in the food supply and to reduce the risk of foodborne illness. The FSP is responsible for licensing and inspecting all food producers and retailers (with the exception of restaurants) in the state (over 11,000 licenses).

The recent occurrence of cyanotoxins in Salem's drinking water led to a large number of local manufactured food producers (who use Salem's drinking water in their food processing) contacting ODA's FSP looking for a cyanotoxin testing process to test their food products for safety, brand integrity and, if cyanotoxins were detected, justification/support for filing a loss

claim with their insurance company. Unfortunately, there is no currently approved method for the testing of cyanotoxins in manufactured food products and no regulatory limits defined.

This recent incident of cyanotoxin contamination, which could potentially take place in other parts of the state, has highlighted a need for ODA's Regulatory Lab and the FSP to collaborate in order to research, develop and implement testing methods of manufactured food products for the presence of cyanotoxins and possible other emerging water contaminants. The ODA's Regulatory Lab, does not have the current capacity (either personnel or equipment) to carry out the research, method development and testing needed to create an approved cyanotoxin testing process for manufactured foods. This request will help fund the development of such a testing process, help ensure public health and the economic stability of Oregon's Manufactured Food Producers in future effected areas.

Action Requested
The Department respectfully requests the Emergency Board appropriate $730,295 General Fund for the current 2017-19 biennium. Funding would support one Limited Duration position (0.38 FTE in 2017-19); new dedicated analytical equipment; research and method development supplies and expenses and other miscellaneous staff resources and expenses. Work is expected to continue into the 2019-21 biennium and is estimated to be $375,802 General Fund, which includes 1.00 FTE.

According to preliminary research conducted by ODA Regulatory Lab personnel, Scientists in England have developed an ISO accredited method for testing for cyanotoxins in fish and shellfish. There also exists an approved method for testing for cyanotoxins in water in which parts of the extraction process might be applicable to food testing. Funding of this request will allow ODA's Regulatory Lab to use the above existing research and data to help achieve an approved method for testing for cyanotoxins in food products.

It is the agency's hope that once this method is developed, the Regulatory Lab would be able to use existing staff and the equipment and supplies purchased from this request, to offer ongoing cyanotoxin testing to Oregon's Manufactured Food Processors on a fee-for-service basis.

Legislation Affected
Oregon Law 2017, Chapter 562, Section 1, Subsection (2)

Sincerely,

Alexis M. Taylor, Director
Oregon Department of Agriculture

Attachments: ODA Cyanotoxin Estimates