UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

SEP 10 2015

Ms. Patty Z. Kouyoumdjian
Executive Officer
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

Dear Ms. Kouyoumdjian:

The U.S. Environmental Protection Agency (EPA) has reviewed the California State Water Resources Control Board (SWRCB) Resolution Number 2012-0018; Amendment to the Water Quality Control Plan for the Lahontan Region (Basin Plan): *To Replace a Pesticide Water Quality Objective with a Waste Discharge Prohibition on Pesticides with Exemption Criteria* (the Amendment). By this letter, I am pleased to inform you that I am approving the water quality standards portions of this amendment.

The Lahontan Regional Water Quality Control Board adopted the Amendment on December 7, 2011 under Resolution No. R6T-2011-0102, and adopted by the SWRCB on May 15, 2012 under Resolution No. 2012-0018. The Amendment was certified by the California Office of Administrative Law (OAL) on September 6, 2012, in accordance with 40 CFR 131.6(e) that the standards were duly adopted pursuant to California law. EPA received the main submission for review on July 24, 2012 and received notice of the OAL certification on September 10, 2012.

Section 303(c) of the Clean Water Act (CWA) requires EPA to approve or disapprove new or revised state-adopted water quality standards. The State regulatory provisions which are subject to EPA's approval authority under Section 303(c) are those addressing antidegradation, beneficial uses, water quality criteria, and certain provisions addressing implementation of water quality standards for surface waters.

The Amendment makes various revisions to the Basin Plan in Chapters 3 (Water Quality Objectives), 4 (Implementation), and 5 (Water Quality Control Measures for the Lake Tahoe Basin). Revisions in Chapter 3 and Chapter 5 include the removal of the existing water quality objective for pesticides. Other revisions in Chapter 3 include changes to the water quality objectives for use of the fish toxicant rotenone. In addition, the revisions in Chapter 5, pp. 5.1-10 include the removal of water quality objectives for use of rotenone that are duplicative of the revised rotenone water quality objectives in Chapter 3. We have determined that the above revisions are subject to EPA's 303(c) approval authority and are consistent with the requirements of the CWA and its implementing regulations at 40 CFR Part 131.5 and 131.6.[1]

[1] The regulations governing water quality standards were revised in a Final Rule signed August 5, 2015. See 80 FR 51019 ("Final Rule"). This revised rule is effective October 20, 2015, and includes a transition period. For that reason, the State's revisions are evaluated using the regulations as they existed before the Final Rule. See 80 FR 51022.

Revisions in Chapter 4 and additional revisions to Chapter 5 include a new waste discharge prohibition for pesticide application to water with specific exemption criteria and also include changes to certain requirements regarding rotenone use in fisheries management. EPA is not acting on the revisions in Chapter 4 nor the additional revisions to Chapter 5 as they are not new or revised water quality standards under Section 303(c) of the Clean Water Act, but rather implementation provisions that are not within the scope of this approval action.

In order to provide further clarity, we have provided an attachment to this transmittal letter that includes the complete text of the provisions that we are approving in today's action.

Public Participation

Public involvement is an integral component of a successful water quality program. Based upon our review of the administrative record for the subject amendment, the public review procedures followed by the State in the development of State Board Resolution No. 2012-0018 and the Regional Board Resolution R6T-2011-0102 are consistent with the procedural requirements set forth in 40 CFR 131.20(b).

Endangered Species Act

Section 7(a) of the Endangered Species Act (ESA) states that each federal agency shall ensure that any action authorized, funded, or carried out by such agency will not likely jeopardize the continued existence of any threatened or endangered (listed) species or result in the destruction or adverse modification of critical habitat. On August 24, 2015, EPA initiated informal consultation with the U.S. Fish and Wildlife Service (Service) on our action concerning the revised pesticide and rotenone water quality objectives. EPA concluded consultation with the Service on August 31, 2015 with the Service's concurrence with EPA's finding of "may affect, not likely to adversely affect" for the proposed criteria.

EPA looks forward to working with you and your staff toward our mutual goal of protecting and enhancing the quality of California's waters. If EPA can be of further assistance in meeting these goals, please call me at (415) 972-3438 or have your staff contact Matthew Mitchell at (415) 972-3508.

Sincerely,

Michael Montgomery
Acting Director, Water Division

Enclosure

cc: Mary Fiore-Wagner, Lahontan Regional Water Quality Control Board
Dan Sussman, Lahontan Regional Water Quality Control Board
Rik Rasmussen, State Water Resources Control Board
Corey Buffo, U.S. EPA, Office of Water

Water Quality Standards in the Basin Plan Amendment to the Water Quality Control Plan for the Lahontan Region; *Amendment to the Water Quality Control Plan for the Lahontan Region (Basin Plan) to Replace a Pesticide Water Quality Objective with a Waste Discharge Prohibition on Pesticides with Exemption Criteria*

(Resolution Number 2012-0018 (R6T-2011-0102))

The State Water Resources Control Board (SWRCB) Resolution Number 2012-0018 (R6T-2011-0102); *Amendment to the Water Quality Control Plan for the Lahontan Region (Basin Plan) to Replace a Pesticide Water Quality Objective with a Waste Discharge Prohibition on Pesticides with Exemption Criteria* (the Amendment) was adopted by the Lahontan Regional Water Quality Control Board (Regional Board) on December 7, 2011 under Resolution No. 6T-2011-0102, and adopted by the State Water Resources Control Board (SWRCB) on May 15, 2012 under Resolution No. 2012-0018. The Amendment was certified by the California Office of Administrative Law on September 6, 2012. The complete submission package was received by EPA on September 10, 2012.

APPROVALS

EPA finds the portions of the Amendment listed below to be consistent with the Clean Water Act and implementing regulations at 40 CFR 131, and approves these portions of the amendment:

Revisions to Chapter 3 (Water Quality Objectives)

Chapter 3, pp. 3-2, 3-3
Water Quality Objectives Which Apply to All Surface Waters.
~~Pesticides~~

Chapter 3, pp. 3-3
3. **Water Quality Objectives for Fisheries Management Activities Using the Toxicant Rotenone**
Rotenone is a fish toxicant presently used by the California Department of Fish and Game (DFG) and the United States Fish and Wildlife Service (USFWS) for fishery management purposes. (See detailed discussions later in this Chapter and in Chapter 4.) Additional water quality objectives pertinent to rotenone treatments are: Color, ~~Pesticides~~, Chemical Constituents, ~~Species Composition~~, and Toxicity.

Chapter 3, pp.3-5
Pesticides
~~For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, piscicides and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi, or weeds capable of infesting or harming vegetation, humans, or animals (CA Agricultural Code 12735).~~

~~Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.~~

~~Waters designated as MUN shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations specified in Table 6444-A of Section 64444 (Organic Chemicals) of Title 22 of the California Code of Regulations which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.~~

Chapter 3, pp. 3-10
Water Quality Objectives for Fisheries Management Activities Using the Fish Toxicant Rotenone
Rotenone is a fish toxicant presently used by the California Department of Fish and Game (DFG) and the United States Fish and Wildlife Service (USFWS) for fishery management purposes. (See Chapter 4 for a more complete discussion of this topic.)

The application of rotenone ~~solutions~~ and the detoxification agent potassium permanganate can cause several water quality objectives to be temporarily exceeded, both inside and outside of project boundaries. (Project boundaries are defined as encompassing the treatment area, the detoxification area, and the area downstream of the detoxification station up to thirty-minute travel time.)

~~Additional narrative water quality objectives applicable to rotenone treatments are color, pesticides, toxicity, and species composition.~~ The Basin Plan (See Chapter 4) contains prohibitions against discharges of waste that result in violation of narrative or numeric water quality objectives. Conditional ~~variances~~ exemptions to these ~~objectives~~ prohibitions may be granted by the Regional Board~~'s~~ or its Executive Officer, if so delegated, for rotenone applications by the DFG or the USFWS, provided that such projects comply with the conditions described below and with the ~~conditions~~ criteria described in Chapter 4 ~~(Implementation)~~ under the section entitled ~~"Rotenone Use In Fisheries Management."~~ "Exemption for Fisheries Management." The following project-specific water quality objectives or receiving water limitations also apply to fisheries management projects using rotenone during and immediately after treatment."

Color
The characteristic purple discoloration resulting from the discharge of potassium permanganate shall not be discernible more than two miles downstream of project boundaries at any time. Twenty-four (24) hours after shutdown of the detoxification operation, no color alteration(s) resulting from the discharge of potassium permanganate shall be discernible within or downstream of project boundaries.

~~Pesticides~~ Chemical Constituents
Chemical residues resulting from rotenone treatment must not exceed the following limitations:

1. The concentration of naphthalene outside of project boundaries shall not exceed 25 µg/l (ppb) at any time.

2. The concentration of rotenone, trichloroethylene (TCE), xylene, or acetone (or potential trace contaminants such as benzene or ethylbenzene) outside of project boundaries shall

not exceed the detection levels for these respective compounds at any time. "Detection level" is defined as the minimum level that can be reasonably detected using state-of-the-art equipment and methodology.

3. After a two-week period has elapsed from the date that rotenone application was completed, no chemical residues resulting from the treatment shall be present at detectable levels within or downstream of project boundaries.

4. No chemical residues resulting from rotenone treatments shall exceed detection levels in ground water at any time.

Species Composition

~~The reduction in fish diversity associated with the elimination of non-native game fish may be part of the project goal, and may be unavoidable. However, non-target aquatic populations (e.g., invertebrates, amphibians) that are reduced by rotenone treatments are expected to repopulate project areas within one year. Where species composition objectives are established for specific water bodies or hydrologic units,~~ or ecoregions, ~~the established objective(s) shall be met for all non-target aquatic organisms within one year following rotenone treatment. For multi-year treatments (i.e., when rotenone is applied to the same water body during two or more consecutive years) the established objective(s) shall be met for all non-target aquatic organisms within one year following the final rotenone application to a given water body.~~

~~Threatened or endangered aquatic populations (e.g., invertebrates, amphibians) shall not be adversely affected. The DFG shall conduct pre-project monitoring to prevent rotenone application where threatened or endangered species may be adversely affected.~~

Toxicity

Chemical residues resulting from rotenone treatment must not exceed the limitations listed above for ~~pesticides~~ chemical constituents.

Chapter 5, pp. 5.1-7, 5.1-8

Pesticides

~~For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, piscicides and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi, or weeds capable of infesting or harming vegetation, humans, or animals (CA Agricultural Code § 12735).~~

~~Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.~~

~~Waters designated as MUN shall not contain concentrations of pesticides and herbicides in excess of the limiting concentrations specified in Table 6444-A of Section 64444 (Organic Chemicals) of Title 22 of the California Code of Regulations which is incorporated by~~

reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.

Chapter 5, pp. 5.1-10

Water Quality Objectives for Fisheries Management Activities Using the Fish Toxicant Rotenone

Rotenone is a fish toxicant used by the California Department of Fish and Game (DFG) and the United States Fish and Wildlife Service (USFWS) for fishery management purposes. (See Chapter 4 for a more complete discussion of this topic.)

The application of rotenone solutions and the detoxification agent potassium permanganate can cause several water quality objectives to be temporarily exceeded, both inside and outside of project boundaries. (Project boundaries are defined as encompassing the treatment area, the detoxification area, and the area downstream of the detoxification station up to thirty-minute travel time.)

Additional narrative water quality objectives applicable to rotenone treatments are color, pesticides, toxicity, and species composition. Conditional variances to these objectives may be granted by the Regional Board's Executive Officer for rotenone applications by the DFG, provided that such projects comply with the conditions described below and with the conditions described in Chapter 4 (Implementation) under the section entitled "Rotenone Use In Fisheries Management."

Color

The characteristic purple discoloration resulting from the discharge of potassium permanganate shall not be discernible more than two miles downstream of project boundaries at any time. Twenty-four (24) hours after shutdown of the detoxification operation, no color alteration(s) resulting from the discharge of potassium permanganate shall be discernible within or downstream of project boundaries.

Pesticides

Chemical residues resulting from rotenone treatment must not exceed the following limitations:

1. The concentration of naphthalene outside of project boundaries shall not exceed 25 µg/l (ppb) at any time.

2. The concentration of rotenone, trichloroethylene (TCE), xylene, or acetone (or potential trace contaminants such as benzene or ethylbenzene) outside of project boundaries shall not exceed the detection levels for these respective compounds at any time. "Detection level" is defined as the minimum level that can be reasonably detected using state-of-the-art equipment and methodology.

3. After a two-week period has elapsed from the date that rotenone application was completed, no chemical residues resulting from the treatment shall be present at detectable levels within or downstream of project boundaries.

4. No chemical residues resulting from rotenone treatments shall exceed detection levels in ground water at any time.

Species Composition

The reduction in fish diversity associated with the elimination of non-native game fish or exotic species may be part of the project goal, and may therefore be unavoidable. However, non-target aquatic populations (e.g., invertebrates, amphibians) that are reduced by rotenone treatments are expected to repopulate project areas within one year. Where species composition objectives are established for specific water bodies or hydrologic units, the established objective(s) shall be met for all non-target aquatic organisms within one year following rotenone treatment. For multi-year treatments (i.e., when rotenone is applied to the same water body during two or more consecutive years) the established objective(s) shall be met for all non-target aquatic organisms within one year following the final rotenone application to a given water body.

Threatened or endangered aquatic populations (e.g., invertebrates, amphibians) shall not be adversely affected. The DFG shall conduct pre-project monitoring to prevent rotenone application where threatened or endangered species may be adversely impacted.

Toxicity

Chemical residues resulting from rotenone treatment must not exceed the limitations listed above for pesticides.