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7

8 *Via Electronic Mail*  
9 *(Hardcopy to Follow)*

10 BEFORE THE STATE WATER RESOURCES CONTROL BOARD

11 **In the Matter of Waste Discharge**  
12 **Requirements for the Town of Discovery**  
13 **Bay CSD Discovery Bay Wastewater**  
14 **Treatment Plant, Contra Costa County,**  
15 **California Regional Water Quality**  
16 **Control Board – Central Valley Region,**  
17 **Order No. R5-2008-0179; NPDES No.**  
18 **CA0078590**

SWRCB/OCC NO. \_\_\_\_\_

PETITION FOR REVIEW

18 Pursuant to Water Code section 13320 and Title 23 of the California Code of Regulations  
19 section 2050, Petitioners San Luis & Delta-Mendota Water Authority (“Authority”), on behalf of its  
20 member agencies, and Westlands Water District (“Westlands”) (collectively, “Petitioners”)  
21 respectfully petition the State Water Resources Control Board (“State Water Board”) to review and  
22 vacate Order No. R5-2008-0179 (“Order”), adopted by the California Regional Water Quality  
23 Control Board, Central Valley Region (“Regional Board”), on December 4, 2008.

24 The Order establishes discharge requirements for the Town of Discovery Bay’s (“Town”)  
25 Discovery Bay Wastewater Treatment Plant (“Facility”), which is a publicly owned treatment works  
26 which serves a population of approximately 16,000 people. Wastewater treated at the Facility is  
27 discharged into the Sacramento-San Joaquin Delta (“Delta”) via the Old River, a water of the  
28 United States, within the San Joaquin Delta Hydrologic Unit. The discharge occurs near facilities

1 used to deliver water to the Authority's member agencies, including Westlands. As the discharge at  
2 issue is into surface waters that are jurisdictional waters of the United States, the discharge is  
3 subject to the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.* ("Clean Water Act"),  
4 and the Clean Water Act's National Pollutant Discharge Elimination System ("NPDES") permit  
5 program. Accordingly, in addition to serving as waste discharge requirements (WDRs) under the  
6 California Water Code, the adopted Order and the waste discharge requirements serve as a NPDES  
7 permit (NPDES No. CA0078590).

8 Prior to the Regional Board's adoption of the Order, Petitioners expressed concern to the  
9 Regional Board – in timely written comments and through subsequent oral comments made at the  
10 hearing on the Order – that the Order's discharge requirements are inconsistent with applicable  
11 water quality standards and objectives, and do not adequately protect the beneficial uses of the  
12 waters receiving the Town's discharges. Despite these concerns and similar ones raised by other  
13 interested persons, the Regional Board adopted the Order.

14 **1. NAME AND ADDRESS OF PETITIONERS**

15 San Luis & Delta-Mendota Water Authority  
16 P.O. Box 2157  
17 Los Banos, California 93635  
18 dan.nelson@sldmwa.org  
19 (209) 826-9696

20 Westlands Water District  
21 P.O. Box 6056  
22 Fresno, CA 93703  
23 (559) 224-1523

24 Attorneys for San Luis & Delta-Mendota Water Authority and Westlands Water District

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1           2.     **THE SPECIFIC ACTION OR INACTION OF THE REGIONAL BOARD**  
2                   **WHICH THE STATE WATER BOARD IS REQUESTED TO REVIEW AND**  
3                   **A COPY OF ANY ORDER OR RESOLUTION OF THE REGIONAL BOARD**  
                  **WHICH IS REFERRED TO IN THIS PETITION**

4           Petitioners seek review of the Order, a copy of which is attached hereto as **Exhibit A**. The  
5 full title of the Order is "Order No. R5-2008-0179, NPDES Permit No. CA0078590, 'Waste  
6 Discharge Requirements for the Town of Discovery Bay CSD Discovery Bay Wastewater  
7 Treatment Plant Contra Costa County.'"

8           3.     **THE DATE ON WHICH THE REGIONAL BOARD ACTED OR REFUSED**  
9                   **TO ACT OR ON WHICH THE REGIONAL BOARD WAS REQUESTED TO**  
                  **ACT**

10          The Regional Board adopted the Order on December 4, 2008.

11          4.     **A FULL AND COMPLETE STATEMENT OF THE REASONS THE**  
12                 **ACTION OR FAILURE TO ACT WAS INAPPROPRATE OR IMPROPER**

13          Before the October 27, 2008, deadline to do so, Petitioners, as well as other interested  
14 persons and entities, submitted detailed comments on discharge requirements proposed in a draft  
15 order. (Petitioners' October 27, 2008, comment letter, which also requesting designated party status  
16 with respect to the proceeding, is attached hereto, without exhibits, as **Exhibit B**.) Those collective  
17 comments, which are incorporated into this petition by this reference, drew the Regional Board's  
18 attention in part to the fact that the proposed discharge requirements failed to comport with statutory  
19 and regulatory requirements because they were inconsistent with applicable water quality standards  
20 and objectives and did not adequately protect the beneficial uses of the waters receiving the Town's  
21 discharges. Petitioners further highlighted the shortcomings of the proposed discharge requirements  
22 through oral comments made at a December 4, 2008, hearing. The Regional Board adopted the  
23 Order without resolving many of the concerns raised.

24          As a result, the Order is improper for the following reasons:

25                 a.     **The Order Fails to Comply with the Water Quality Objectives**  
26                         **Established in the Bay-Delta Plan and the Basin Plan**

27          The discharge requirements imposed through the Order are inconsistent with water quality  
28 objectives established in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San

1 Joaquin Delta Estuary ("Bay-Delta Plan"), adopted in or around May 2005, and the Water Quality  
2 Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins ("Basin Plan"),  
3 adopted in or around 1998 (as revised in or around October 2007).<sup>1</sup> Petitioners' comments to the  
4 Regional Board urged the implementation of discharge requirements that harmonized with the water  
5 quality objectives from the Bay-Delta Plan and Basin Plan.

6 As just one example of an inconsistency, Petitioners highlighted the differences in how  
7 salinity concentration is treated in the Order versus the Bay-Delta Plan and Basin Plan. In the  
8 general area of the Town's discharge, the Bay-Delta Plan and Basin Plan establish salinity  
9 objectives of 1,000  $\mu\text{mhos/cm}$  during the September through March period and 700  $\mu\text{mhos/cm}$   
10 during the April through August period. Furthermore, the Order recognizes that the Town's  
11 discharge "may cause or contribute to an exceedance of a water quality objective for salinity . . ."  
12 (Order No. R5-2008-0179, Attachment F, Sec. IV.C.3.n.iv, at p. F-26.) Nevertheless, the Order  
13 allows the Town to discharge effluent with salinity concentration of 2,700  $\mu\text{mhos}$  (annual average),  
14 provided the Town implements a plan to achieve a salinity reduction goal stated in the Order. Only  
15 if the Town fails to implement a salinity reduction plan must the Town comply with the Bay-Delta  
16 Plan and Basin Plan's salinity objectives. In other words, the Regional Board treats the Bay-Delta  
17 Plan and Basin Plan's salinity objectives as penalties for noncompliance with salinity reduction  
18 goals, rather than limits applicable to the Town's effluent.

19 Furthermore, whereas compliance with the salinity objectives under the Bay-Delta Plan and  
20 the Basin Plan are based on a 30-day running average, compliance under the Order is based on an  
21 annual average. And whereas monitoring of salinity under the Bay-Delta Plan and Basin Plan is to  
22 occur continuously, monitoring under the Order is to occur twice a month. In all, these deviations  
23 ensure that the Town's discharges will likely never help achieve Delta salinity objectives.

24 The nature of these discharge requirements is troubling in its own right, but the Regional  
25 Board's justification for them is equally unsettling. Looking again to the Order's handling of  
26 salinity discharge requirements, the Regional Board contends the State Water Board intended for

27 \_\_\_\_\_  
28 <sup>1</sup> Certain documents referenced herein, such as the Bay-Delta Plan, are readily available and on that basis are not  
attached as exhibits. (See 23 Cal.Code.Regs § 648.3 [records deemed evidence by reference].)

1 “permit limitations to play a limited role . . . in achieving compliance with the EC water quality  
2 objectives.” (Order No. R5-2008-0179, Attachment F, Sec. IV.C.3.n.iv, at p. F-25.) The assertion  
3 is incorrect because it directly contravenes in particular the Bay-Delta Plan’s mandates that the  
4 Regional Board take a chief role in implementing water quality objectives through the discharge  
5 permits it administers. Indeed, the State Water Board stated clearly in its program of  
6 implementation the Regional Board’s mandatory duty in administering permits:

7           Central Valley Regional Water Board shall impose discharge controls on in-Delta  
8           discharges of salts by agricultural, domestic, and municipal dischargers.

9 (2006 Bay Delta Plan at IV.B.1.ii.) The Bay-Delta Plan went on to state that the implementation of  
10 salinity objectives should be accomplished through “pollutant discharge controls.” (*Id.* at IV.B.)  
11 Stated differently, the Regional Board should, but had been failing to, help achieve the salinity  
12 objectives by imposing appropriate discharge controls in the permits it issues.<sup>2</sup>

13           On this point, it is worth noting that the Petitioners’ concern about inconsistencies between  
14 the Order and the Bay-Delta Plan and Basin Plan was corroborated by a recent filing with the State  
15 Water Board by the Central Valley Clean Water Association (“CVCWA”), an advocacy group  
16 whose mission is to “effectively represent the interests of wastewater agencies in the Central Valley  
17 in regulatory matters.” (Central Valley Clean Water Association Strategic Plan, June 19, 2008,  
18 available at <http://www.cvcwa.org/bp.htm>, as of December 30, 2008.)

19           In a September 30, 2008, letter to the SWRCB, CVCWA requested that the State Water  
20 Board provide relief from the State Water Board’s requirement that the Regional Board effectuate  
21 expanded application of water quality objectives to municipal dischargers:

22           “In 2006, the State Water Board amended the Bay-Delta Plan . . . implementation  
23           program to require the Central Valley Regional Water Board to ‘impose discharge  
24           controls on in-Delta discharges of salts by agricultural, domestic, and municipal  
25           dischargers.’ (2006 Bay-Delta Plan at pp. 10, 28.)”

26 <sup>2</sup> That the Regional Board is expected to exercise its authority to investigate and implement measures necessary to  
27 protect the Delta from further decline is highlighted by a December 16, 2008, letter from Senator Diane Feinstein to the  
28 State Water Board and Regional Board. In that letter, a copy of which is attached as Exhibit C, Senator Feinstein urged  
the State Water Board and Regional Board to take “prompt and effective action” to address Delta stressors, including  
discharges from municipal dischargers. Senator Feinstein’s letter warned that “delaying necessary action is simply not  
an option” and would be contrary to the State Water Board and Regional Board’s “obligation to protect the Delta.”

1 (See **Exhibit D**, September 30, 2008, letter by CVCWA.) Thus, CVCWA recognized, discharge  
2 requirements like those in the Order must be consistent with water quality objectives stated in the  
3 Bay-Delta Plan and Basin Plan. Furthermore, as CVCWA acknowledged, the Regional Board is  
4 expected to “impose discharge controls” – e.g., discharge requirements in Orders like the one  
5 applicable to the Town – that advance those objectives.<sup>3</sup>

6 By adopting the Order it did, however, the Regional Board ignored its mandate from the  
7 State Water Board. The Order’s failure to implement and effectuate water quality objectives stated  
8 in the Bay-Delta Plan and Basin Plan renders it unlawful. For these reasons, the Order should be  
9 vacated or remanded to the Regional Board with instruction to ensure that all of the Order’s  
10 discharge requirements are consistent with the Bay-Delta Plan and the Basin Plan.

11 **b. The Order Implements Discharge Requirements Without Considering**  
12 **New Scientific Information About the Declining Health of the Delta.**

13 The Order may not go far enough to adequately ensure protection of the beneficial uses of the  
14 water receiving the Town’s discharges. The Order’s potential shortcomings in this regard are  
15 underscored by the fact that the Regional Board implemented discharge requirements without  
16 substantial justification or in disregard of emerging scientific information warranting heightened  
17 scrutiny of what the Order allows.

18 For example, the Order imposes an effluent limitation for ammonia based upon United  
19 States’ Environmental Protection Agencies’ “Ambient Water Quality Criteria for the Protection of  
20 Freshwater Aquatic Life.” (Order No. R5-2008-0179, Attachment F, Sec. IV.C.3.f, at p. F-18.)  
21 However, the State Water Board and the Regional Board have identified the emergence of  
22 potentially important new science related to contaminants, including ammonia, in the 2008 Strategic  
23 Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (“Bay

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25  
26 <sup>3</sup> At a December 4, 2008, Regional Board hearing regarding the Order, the CVCWA addressed the Regional Board to  
27 dispute the Petitioners’ characterization of this language from the CVCWA’s September 30, 2008, letter. The  
28 CVCWA’s objection to the relevant State Water Board action notwithstanding, the September 30 letter speaks for itself  
– as amended, the 2006 Bay-Delta Plan “expanded application of [water quality] objectives on municipal dischargers.”  
(See **Exhibit D**, September 30, 2008, letter by CVCWA.)

1 Delta Strategic Workplan"). In that Bay Delta Strategic Workplan, for instance, the State Water  
2 Board and the Regional Board wrote:

3 "Studies suggest that delta smelt may be particularly sensitive to ammonia and  
4 that ammonia may limit primary productivity in the Delta . . . . Ammonia,  
5 specifically the unionized form, is toxic to fish, with salmonid species being most  
6 sensitive. In addition, algae growth is inhibited when nitrogen is in the form of  
7 ammonia rather than nitrate. Major sources of ammonia loading to the lower  
8 Sacramento River include agricultural discharges and waste-water treatment plant  
9 discharges."

8 (Bay Delta Strategic Workplan at 53.) Furthermore, the Regional Board's own concern with  
9 ammonia in the Delta has also been the subject of two recent summary papers which are attached  
10 hereto as **Exhibit E**. Nevertheless, emerging scientific information the Petitioners referred the  
11 Regional Board to on this matter was dismissed as failing to rise to the level of "defensible  
12 scientific information." Yet, the Regional Board did not explain what it considers to be "defensible  
13 scientific information," and it is not apparent that the Regional Board applies that standard to  
14 support the other discharge requirements of the Order.

15 For these reasons, the Order should be vacated or remanded to the Regional Board with  
16 instruction to craft discharge requirements that are supported by existing and emerging scientific  
17 information, as well as stated conclusions by the Regional Board staff as to how the discharge  
18 requirements will protect the beneficial uses of the receiving waters going forward.

19 **c. The Order Fails to Require More Stringent Monitoring.**

20 The State Water Board and Regional Board recognized in the Bay Delta Strategic Workplan  
21 the importance of increased monitoring for contaminants. The Bay Delta Strategic Workplan  
22 provides:

23 The pelagic organism decline in the Delta and subsequent increased focus on  
24 contaminants as a potential cause highlight the need for regularly compiling,  
25 assessing, and reporting data that is currently being collected and the need to  
26 better coordinate monitoring efforts.

26 (Bay Delta Strategic Workplan, p. 59.) More specifically, the State Water Board and Regional  
27 Board noted that there "are a suite of contaminants and source categories that pose a concern for  
28 some Delta beneficial uses and there is also concern for an emerging list of new contaminant

1 categories (pharmaceuticals and endocrine disrupters)." (Strategic Workplan, p. 25.) Therefore, as  
2 called for in the Strategic Workplan, Petitioners requested a more comprehensive monitoring plan  
3 to be included in the Order.

4 To illustrate the need for a more comprehensive plan, Petitioners cited, as an example,  
5 recent investigations that claim to have discovered detectable levels of pharmaceuticals in drinking  
6 water supplies across the country. ("Prescription Drugs Found in Drinking Water Across U.S."  
7 Associated Press, March 10, 2008; "AP Enterprise: Drugs Affect More Drinking Water,"  
8 Associated Press, September 11, 2008; "AP Enterprise: Report Prompts More Testing," Associated  
9 Press, September 11, 2008.) The investigations assert medication not absorbed by its taker "passes  
10 through the [body] and is flushed down the toilet," and that even though the wastewater is treated  
11 "most treatments do not remove all drug residue." Thus, according to the investigations,  
12 prescription drugs can enter water supplies through municipal wastewater discharges. Whether the  
13 Order should include discharge requirements that specifically address pharmaceuticals, for example,  
14 is presently unclear. However, and keeping with the pharmaceutical example, emerging science  
15 indicates that "persistent exposure to random combinations of low levels of pharmaceuticals . . .  
16 [indicate] alarming effects on human cells and wildlife." ("Prescription Drugs Found in Drinking  
17 Water Across U.S." Associated Press, March 10, 2008.) Therefore, Petitioners voiced concern that  
18 the monitoring and reporting requirements of the Order should be increased altogether.

19 The Regional Board staff's response prior to the December 4, 2008, hearing was that the  
20 Order "contains rigorous monitoring requirements that are adequate to determine compliance with  
21 the requirements and limitations." (Regional Board "Response to Comments for the Town of  
22 Discovery Bay Community Service District Tentative Waste Discharge Requirements Revised 2  
23 December 2008," attached hereto as **Exhibit F**, at pp. 20-21.) At the December 4, 2008, hearing,  
24 the Regional Board staff made comments to the effect that, as respects increased monitoring of  
25 toxics and other constituents: 1) the Regional Board was not in a position to impose such  
26 requirements at this time because of uncertainty about how to do so; 2) the Regional Board needs  
27 direction from the State Water Board as to what sort of monitoring requirements should be imposed  
28 on in-Delta municipal dischargers like the Town; but 3) until the Regional Board receives that



1 direction, it does not believe it appropriate to impose heightened monitoring requirements on a  
2 discharger-specific basis.

3 As discussed above, the Regional Board staff expressed hesitance in relying on emerging  
4 scientific information to support discharge requirements in Orders like the one issued for the Town.  
5 Although Petitioners recognize that there is uncertainty regarding specific threats to Delta fish  
6 species, comprehensive information gathering will help prevent future information gaps in the  
7 scientific information available about the Delta and its ecosystem (i.e., more information about the  
8 Delta will invariably assist in the development of "defensible scientific information" about it).  
9 Therefore, rejecting opportunities to require monitoring that could collect sort of data is  
10 shortsighted. Petitioners recommended that the Regional Board impose heightened monitoring  
11 requirements and – to ensure that the information is available to scientists and others studying the  
12 Delta – require the Town to post on its web site information about its monitoring and testing as  
13 frequently as feasible (e.g., daily or weekly).

14 **5. THE MANNER IN WHICH PETITIONERS ARE AGGRIEVED**

15 The Authority, formed in 1992 as a joint powers authority, consists of 31 public agencies,  
16 each of which contracts with the United States Department of the Interior, Bureau of Reclamation  
17 ("Reclamation"), for water from the Central Valley Project ("CVP"). The Authority's members  
18 hold contracts with Reclamation for the delivery of approximately 3.3 million acre-feet of CVP  
19 water annually. Reclamation conveys CVP water delivered to the Authority's members through the  
20 Sacramento-San Joaquin River Delta. Of the amount of water under contract, the Authority's  
21 members put to beneficial use, on average, approximately 2 million acre-feet of water on about 1.2  
22 million acres of agricultural lands within the western San Joaquin Valley and parts of San Benito  
23 and Santa Clara Counties, California; 200,000 acre-feet for municipal and industrial uses, including  
24 those within the Silicon Valley; and approximately 300,000 acre-feet for environmental purposes,  
25 including for waterfowl and wildlife habitat management in the San Joaquin Valley, California.

26 Westlands, a member of the Authority, is a California water district formed in 1952.  
27 Westlands uses CVP water for irrigation of approximately 500,000 acres on the west side of the San  
28 Joaquin Valley in Fresno and Kings Counties, as well as for municipal and industrial purposes

1 within those Counties. Westlands' farmers produce more than 60 high quality commercial food and  
2 fiber crops sold for the fresh, dry, canned, and frozen food markets, both domestic and export.  
3 More than 50,000 people live and work in the communities that are dependent on Westlands'  
4 agricultural economy. As such, the Authority and Westlands have a direct interest in discharges to  
5 the Delta because of the impact the discharges can have on the water supply of the Authorities  
6 member agencies, including Westlands.

7 Two examples highlight this point. First, the State Water Board assigned to Reclamation  
8 significant responsibility for water quality objectives established in the Bay-Delta Plan. As a result,  
9 discharges into the Delta that fail to adequately protect beneficial uses of Delta water could require  
10 Reclamation to increase releases from CVP reservoirs and/or reduce pumping at in-Delta CVP  
11 facilities, to avoid a claim that Reclamation is not meeting its responsibilities. Either of those  
12 actions would likely reduce the amount of water available to the Authority's members, including  
13 Westlands. In addition, it is likely discharges from wastewater treatment facilities, including the  
14 Facility, adversely affect fish species dependant upon the Delta. Such effects may increase the level  
15 of regulatory constraints imposed under the federal Endangered Species Act on Reclamation's CVP  
16 operations. The added regulatory constraints on the CVP also could limit the amount of CVP water  
17 made available to the Authority's member agencies, including Westlands.

18 Petitioners' interests are therefore directly harmed by the Regional Board's failure to issue  
19 effective and legally defensible discharge requirements applicable to the Town, and other in-Delta,  
20 municipal dischargers like it.

21 **6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH**  
22 **PETITIONER REQUESTS**

23 Petitioner seeks an Order by the State Water Board to vacate Order No. R5-2008-0179  
24 (NPDES No. CA0078590) and remand it to the Regional Board with instructions to prepare and  
25 circulate a new order that comports with regulatory requirements, as specified above.

26 **7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF**  
27 **LEGAL ISSUES RAISED IN PETITION**

28 In California, the Porter-Cologne Water Quality Control Act ("Porter-Cologne Act") is

1 designed to protect the "quality of all the waters of the state . . . for use and enjoyment by the people  
2 of the state." (Cal. Water Code § 13000.) To that end, the Porter-Cologne Act requires the  
3 regulation of all "activities and factors which may affect the quality of the waters of the state . . . to  
4 attain the highest water quality which is reasonable." (*Ibid.*) Sections 13146 and 13247 of the  
5 California Water Code require that the Regional Board, in carrying out activities that affect water  
6 quality, comply with all policies for water quality control and with applicable water quality control  
7 plans approved or adopted by the State Water Board.

8 Furthermore, the Clean Water Act is designed to restore and maintain the "chemical,  
9 physical, and biological integrity of the Nation's waters." (33 U.S.C. § 1251.) To that end, the  
10 Clean Water Act makes it unlawful to discharge pollutants from a point source into the waters of the  
11 United States unless done in compliance with the terms of a valid discharge permit. (33 U.S.C. §  
12 1311(a).) Under the Clean Water Act, pollutants include:

13 [D]redged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge,  
14 munitions, chemical wastes, biological materials, radioactive materials, heat,  
15 wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal,  
and agricultural waste discharged into water.

16 (33 U.S.C. § 1362(6).) Section 402 of the Clean Water Act establishes the NPDES under which the  
17 Environmental Protection Agency or an authorized state may issue permits that grant a permittee the  
18 right to discharge specified pollutants from specified outfalls for a period of time. (33 U.S.C. §  
19 1342.) California is a state authorized to administer NPDES permits and does so through the State  
20 Water Board and Regional Water Quality Control Boards. (Cal. Water Code § 13370 et seq.)

21 The Regional Board therefore has a duty to conform its actions to the Bay-Delta Plan and the  
22 Basin Plan, particularly when issuing discharge requirements like those in this Order, as well as  
23 federal requirements under the Clean Water Act. The Regional Board further has a duty, in carrying  
24 out its responsibilities, to address new developments, in terms of both scientific knowledge and the  
25 declining "health" of Delta waterways.

26 Petitioners believe that an evidentiary hearing before the State Water Board will not be  
27 necessary to resolve the issues raised in this petition. However, Petitioners welcome the

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1 opportunity to present oral argument and respond to any questions the State Water Board may have  
2 regarding this petition.

3 **8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE**  
4 **APPROPRIATE REGIONAL BOARD AND THE DISCHARGERS, IF NOT**  
5 **THE PETITIONER**

6 Concurrent with its filing with the State Water Board, a true and correct copy of this  
7 petition, with attachments, will be sent electronically and by first class mail to Pamela Creedon,  
8 Executive Officer, Regional Water Quality Control Board, Central Valley region, 11020 Sun Center  
9 Drive, Rancho Cordova, CA 95670-6114.

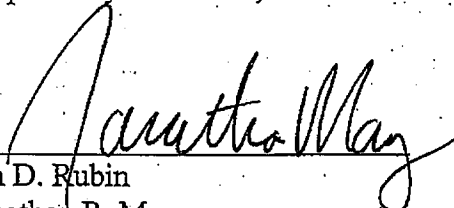
10 Concurrent with its filing with the State Water Board, a true and correct copy of this  
11 petition, with attachments, will be sent by first class mail to the Discharger, c/o Virgil Koehne,  
12 General Manager, Town of Discovery Bay Community Services District, Discovery Bay  
13 Wastewater Treatment Plant Discharger, 1800 Willow Lake Road, Discovery Bay, CA 94505.

14 **9. A STATEMENT THAT THE ISSUES RAISED IN THE PETITION WERE**  
15 **PRESENTED TO THE REGIONAL BOARD BEFORE THE REGIONAL**  
16 **BOARD ACTED, OR AN EXPLANATION OF WHY THE PETITIONER**  
17 **COULD NOT RAISE THOSE OBJECTIONS BEFORE THE REGIONAL**  
18 **BOARD**

19 Petitioners presented the issues addressed in this petition to the Regional Board in detailed  
20 comments submitted to the Regional Board on October 27, 2008, and through oral comments made  
21 at the December 4, 2008, hearing, at which time the Regional Board issued the Order.

22 Dated: January 2, 2009

Respectfully submitted,

23 

24 Jon D. Rubin  
25 Jonathan R. Marz  
26 Courtney K. Friehe  
27 Attorneys for Petitioners, San Luis & Delta-Mendota  
28 Water Authority and Westlands Water District

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

**CENTRAL VALLEY REGION**

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114  
Phone (916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>

**ORDER NO. R5-2008-0179**  
**NPDES NO. CA0078590**

**WASTE DISCHARGE REQUIREMENTS  
FOR THE  
TOWN OF DISCOVERY BAY CSD  
DISCOVERY BAY WASTEWATER TREATMENT PLANT  
CONTRA COSTA COUNTY**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 1. Discharger Information**

<b>Discharger</b>	Town of Discovery Bay CSD
<b>Name of Facility</b>	Discovery Bay Wastewater Treatment Plant
<b>Facility Address</b>	1800 Willow Lake Road
	Discovery Bay, CA 94505
	Contra Costa County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the Town of Discovery Bay CSD from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
001	Treated Municipal Wastewater	37° 53' 08" N	121° 34' 30" W	Old River

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	<b>4 December 2008</b>
This Order shall become effective on:	<b>23 January 2009</b>
This Order shall expire on:	<b>30 November 2013</b>
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	<b>180 days prior to the Order expiration date</b>

IT IS HEREBY ORDERED, that Order No. R5-2003-0067 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 4 December 2008.

\_\_\_\_\_  
ORIGINAL SIGNED BY  
PAMELA C. CREEDON, Executive Officer

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## I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 4. Facility Information**

<b>Discharger</b>	Town of Discovery Bay CSD
<b>Name of Facility</b>	Discovery Bay Wastewater Treatment Plant
<b>Facility Address</b>	1800 Willow Lake Road
	Discovery Bay CA 94505
	Contra Costa County
<b>Facility Contact, Title, and Phone</b>	Virgil Koehne, General Manager Town of Discovery Bay CSD, 925-634-1131
<b>Mailing Address</b>	SAME
<b>Type of Facility</b>	Publicly Owned Treatment Works
<b>Facility Design Flow</b>	2.1 million gallons per day (mgd) (dry weather)

## II. FINDINGS

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Regional Water Board), finds:

**A. Background.** The Town of Discovery Bay CSD [hereinafter Discharger] is currently discharging pursuant to Order No. R5-2003-0067 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0078590. The Discharger submitted a Report of Waste Discharge and applied for a NPDES permit renewal to discharge up to 2.1 mgd of treated wastewater from the Discovery Bay Wastewater Treatment Plant, hereinafter Facility.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

**B. Facility Description.** The Town of Discovery Bay CSD (hereinafter Discharger) owns the Discovery Bay Wastewater Treatment Plant, hereinafter Facility, a publicly owned treatments works (POTW) which serves a population of approximately 16,000 people. Southwest Water Company is under contract to operate the Facility which serves a population of approximately 16,000 people. The treatment system includes two plants (Plant 1 and Plant 2) which each consist of a Hycor headworks screen, an oxidation ditch, two secondary clarifiers, and a shared UV disinfection system. Plant 1 also includes a flow equalization and storage basin (labeled "Emergency Overflow Basin" on Attachment C). The influent flow is split between the two plants, and treated effluents rejoin at the shared UV disinfection system at Plant 2. Wastewater is discharged from Discharge Point 001 (see table on cover page) to the Old River, a water of the United States, within the San Joaquin Delta Hydrologic Unit. Sludge handling is located at

Plant 2 and consists of an aerated, clay lined lagoon (referred to as an aerobic digester), two clay lined sludge lagoons, a belt filter press, and two greenhouse solar drying beds. After processing, samples are taken of the dried biosolids to ensure they conform to Class A standards based on the regulations found at 40 CFR Part 503. Sludge is stored on site in the solar drying bed building or adjacent to the building. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and H are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (CFR)<sup>1</sup> require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and/or Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been

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<sup>1</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.



established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR section 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised August 2006), for the Sacramento and San Joaquin River Basins* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to Old River are as follows:

**Table 5. Basin Plan Beneficial Uses**

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Old River	<p><u>Existing:</u></p> <ul style="list-style-type: none"> <li>• Municipal and Domestic Water Supply (MUN);</li> <li>• Agricultural Supply (AGR);</li> <li>• Industry Process Supply (PRO);</li> <li>• Industry Service Supply (IND);</li> <li>• Contact Recreation (REC-1);</li> <li>• Non-contact Recreation (REC-2);</li> <li>• Warm Freshwater Habitat (WARM);</li> <li>• Cold Freshwater Habitat (COLD);</li> <li>• Migration of Aquatic Organisms (MIGR);</li> <li>• Spawning, Reproduction, and/or Early Development (SPWN);</li> <li>• Wildlife Habitat (WILD);</li> <li>• Navigation (NAV)</li> </ul>

The Basin Plan includes a list of Water Quality Limited Segments (WQLSs), which are defined as "...those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 CFR 130, et seq.)." The Basin Plan also states, "Additional treatment beyond minimum federal standards will be imposed on dischargers to WQLSs. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment." The listing for Old River between the San Joaquin River and the Delta Mendota Canal is listed as a WQLS for low dissolved oxygen in the 303(d) list of impaired water bodies; this segment of Old River is south of the discharge point.. The Old River falls within the southern portion of the Delta Waterways, which is also 303(d)

listed for chlorpyrifos, DDT, diazinon, electrical conductivity, exotic species, Group A pesticides, mercury, and unknown toxicity.

The State Water Resources Control Board adopted the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (revised) 13 December 2006, which, in part, establishes salinity-related water quality objectives in the Bay-Delta.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. **Compliance Schedules and Interim Requirements.** In general, an NPDES permit must include final effluent limitations that are consistent with Clean Water Act section 301 and with 40 CFR 122.44(d). There are exceptions to this general rule. The State Water Board has concluded that where the Regional Water Board's Basin Plan allows for schedules of compliance and the Regional Water Board is newly interpreting a narrative standard, it may include schedules of compliance in the permit to meet effluent limits that implement a narrative standard. See *In the Matter of Waste Discharge Requirements for Avon Refinery* (State Board Order WQ 2001-06 at pp. 53-55). See also *Communities for a Better Environment et al. v. State Water Resources Control Board*, 34 Cal.Rptr.3d 396, 410 (2005). The Basin Plan for the Sacramento and San Joaquin Rivers includes a provision that authorizes the use of compliance schedules in NPDES permits for water quality objectives that are adopted after the date of adoption of the Basin Plan, which was September 25, 1995 (See Basin Plan at page IV-16). Consistent with the State Water Board's Order in the CBE matter, the Regional Water Board has the discretion to include compliance schedules in NPDES permits when it is including an effluent limitation that is a "new interpretation" of a narrative water quality

objective. This conclusion is also consistent with the United States Environmental Protection Agency policies and administrative decisions. See, e.g., Whole Effluent Toxicity (WET) Control Policy. The Regional Water Board, however, is not required to include a schedule of compliance, but may issue a Time Schedule Order pursuant to Water Code section 13300 or a Cease and Desist Order pursuant to Water Code section 13301 where it finds that the discharger is violating or threatening to violate the permit. The Regional Water Board will consider the merits of each case in determining whether it is appropriate to include a compliance schedule in a permit, and, consistent with the Basin Plan, should consider feasibility of achieving compliance, and must impose a schedule that is as short as practicable to achieve compliance with the objectives, criteria, or effluent limit based on the objective or criteria.

For CTR constituents, Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation that exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order includes compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) is included in the Fact Sheet.

- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000); codified at 40 C.F.R. § 131.21] Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for

BOD<sub>5</sub> and TSS that are more stringent than applicable federal standards, but that are nonetheless necessary to meet numeric objectives or to protect beneficial uses. The rationale for including these limitations is explained in Section IV.B.2.a of the Fact Sheet. In addition, the Regional Water Board has considered the factors in Water Code section 13241 in Section IV.B.2.a of the Fact Sheet.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on 1 May 2001. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to 30 May 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to 30 May 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the [Clean Water] Act" pursuant to 40 CFR section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

- N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 is consistent with the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- P. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and

reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- R. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, V.B, and VI.C.2.b of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- S. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- T. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

### III. DISCHARGE PROHIBITIONS

- A. Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.
- B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions I.G. and I.H. (Attachment D).
- C. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.
- D. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

#### IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

##### A. Effluent Limitations – Discharge Point 001

##### 1. Final Effluent Limitations – Discharge Point 001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E):

- a. The Discharger shall maintain compliance with the final effluent limitations specified in Table 6:

**Table 6. Final Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD 5-day @ 20°C	mg/L	20	40	50	---	---
	lbs/day <sup>[1]</sup>	350	700	875	---	---
Total Suspended Solids	mg/L	30	40	50	---	---
	lbs/day <sup>[1]</sup>	525	700	875	---	---
pH	standard units	---	---	---	6.5	8.5
Copper	µg/L	50	---	70	---	---
Nitrate (as N)	mg/L	73	---	126	---	---
Ammonia	mg/L	10	---	30	---	---
	lbs/day <sup>[1]</sup>	177	---	525	---	---

[1] Calculated with the following formula: 8.345 x concentration x flow, using a design flow of 2.1 mgd.

- b. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.
- c. **Acute Whole Effluent Toxicity.** Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
- i. 70%, minimum for any one bioassay; and
  - ii. 90%, median for any three consecutive bioassays.
- d. **Temperature.** The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F.

- e. **Total Coliform Organisms.** Effluent total coliform organisms shall not exceed:
  - i. 23 most probable number (MPN) per 100 mL, as a 7-day median; and
  - ii. 240 MPN/100 mL, more than once in any 30-day period.
- f. **Average Daily Discharge Flow.** The Average Daily Discharge Flow shall not exceed 2.1 mgd.
- g. **Electrical Conductivity.**
  - i. The electrical conductivity in the discharge shall not exceed an annual average of 2,100  $\mu$ mhos/cm;
  - ii. If the Discharger fails to comply with the requirements in 1) or 2), below, the effluent electrical conductivity shall not exceed 1000  $\mu$ mhos/cm, as a monthly average:
    - 1) The Discharger shall develop and submit a Salinity Plan as specified in Provision VI.C.3.a; and
    - 2) The Discharger shall timely implement the Salinity Plan upon the Regional Water Board's approval. The proposed Salinity Plan will be circulated for no less than 30 days for public comment prior to the Regional Water Board's consideration of the Salinity Plan. The Regional Water Board may revise the Salinity Plan prior to final approval.

Upon determination by the Regional Water Board that the Discharger has materially failed to comply with the approved Salinity Plan due to circumstances within its control, the monthly average effluent limitations for electrical conductivity specified in h.ii., above, shall become effective immediately.
- h. **Total Recoverable Iron.** Effluent total recoverable iron shall not exceed 300  $\mu$ g/L, as an annual average.
- i. **Aluminum.** Effluent total recoverable aluminum concentrations shall not exceed 200  $\mu$ g/L, as an annual average.

## 2. Interim Effluent Limitations

Not Applicable

## **B. Land Discharge Specifications**

Not Applicable.

## **C. Reclamation Specifications**

Not Applicable.

## **V. RECEIVING WATER LIMITATIONS**

### **A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in Old River:

1. **Bacteria.** The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL, nor more than ten percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL.
2. **Biostimulatory Substances.** Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
3. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.
4. **Color.** Discoloration that causes nuisance or adversely affects beneficial uses.
5. **Dissolved Oxygen.** The dissolved oxygen concentration to be reduced below 5.0 mg/L at any time.
6. **Floating Material.** Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
7. **Oil and Grease.** Oils, greases, waxes, or other materials to be present in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
8. **pH.** The pH to be depressed below 6.5, raised above 8.5, nor changed by more than 0.5. A one-month averaging period may be applied when calculating the pH change of 0.5.



**9. Pesticides:**

- a. Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;
- b. Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses;
- c. Total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by USEPA or the Executive Officer;
- d. Pesticide concentrations to exceed those allowable by applicable antidegradation policies (see State Water Board Resolution No. 68-16 and 40 CFR §131.12.);
- e. Pesticide concentrations to exceed the lowest levels technically and economically achievable;
- f. Pesticides to be present in concentration in excess of the maximum contaminant levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15;
- g. Thiobencarb to be present in excess of 1.0 µg/L.

**10. Radioactivity:**

- a. Radionuclides to be present in concentrations that are harmful to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- b. Radionuclides to be present in excess of the maximum contaminant levels specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations.

**11. Suspended Sediments.** The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

**12. Settleable Substances.** Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

**13. Suspended Material.** Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.

**14. Taste and Odors.** Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.

**15. Temperature.** The Thermal Plan is applicable to this discharge. The Thermal Plan requires that the discharge shall not cause the following in Old River:

- a. The creation of a zone, defined by water temperatures of more than 1 °F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of the river channel at any point.

b. A surface water temperature rise greater than 4 °F above the natural temperature of the receiving water at any time or place.

16. **Toxicity.** Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

17. **Turbidity.** The turbidity to increase as follows:

- a. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTUs.
- b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
- c. More than 10 NTU where natural turbidity is between 50 and 100 NTUs.
- d. More than 10 percent where natural turbidity is greater than 100 NTUs.

## B. Groundwater Limitations

1. Release of waste constituents from any storage, treatment, or disposal component associated with the WWTP shall not, in combination with other sources of the waste constituents, cause groundwater within influence of the WWTP to contain waste constituents in concentrations in excess of natural background quality or cause the following in groundwater:
  - a. Beneficial uses to be adversely impacted or water quality objectives to be exceeded; and
  - b. Total coliform organisms median of 2.2 MPN/100 mL over any seven-day period.

## VI. PROVISIONS

### A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. The Discharger shall comply with the following provisions:
  - a. If the Discharger's wastewater treatment plant is publicly owned or subject to regulation by California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to Title 23, CCR, Division 3, Chapter 26.
  - b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
    - (i) violation of any term or condition contained in this Order;

- (ii) obtaining this Order by misrepresentation or by failing to disclose fully all relevant facts;
- (iii) a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
- (iv) a material change in the character, location, or volume of discharge.

The causes for modification include:

*New regulations.* New regulations have been promulgated under Section 405(d) of the Clean Water Act, or the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.

*Land application plans.* When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

*Change in sludge use or disposal practice.* Under 40 Code of Federal Regulations (CFR) 122.62(a)(1), a change in the Discharger's sludge use or disposal practice is a cause for modification of the permit. It is cause for revocation and reissuance if the Discharger requests or agrees.

The Regional Water Board may review and revise this Order at any time upon application of any affected person or the Regional Water Board's own motion.

- c. If a toxic effluent standard or prohibition (including any scheduled compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the CWA, or amendments thereto, for a toxic pollutant that is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Regional Water Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition.

The Discharger shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified.

- d. This Order shall be modified, or alternately revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
  - (i) contains different conditions or is otherwise more stringent than any effluent limitation in the Order; or
  - (ii) controls any pollutant limited in the Order.

The Order, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

- e. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
- f. The Discharger shall take all reasonable steps to minimize any adverse effects to waters of the State or users of those waters resulting from any discharge or sludge use or disposal in violation of this Order. Reasonable steps shall include such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge or sludge use or disposal, and adequate public notification to downstream water agencies or others who might contact the non-complying discharge.
- g. The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by USEPA under Section 307 of the CWA, or amendment thereto, for any discharge to the municipal system.
- h. The discharge of any radiological, chemical or biological warfare agent or high-level, radiological waste is prohibited.
- i. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its content.
- j. Safeguard to electric power failure:
  - (i) The Discharger shall provide safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharge shall comply with the terms and conditions of this Order.
  - (ii) Upon written request by the Regional Water Board the Discharger shall submit a written description of safeguards. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past five years on effluent quality and on the capability of the Discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Water Board.
  - (iii) Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Regional Water Board not approve the existing safeguards, the Discharger shall, within ninety days of having been advised in writing by the Regional Water Board that the existing safeguards are inadequate, provide to the Regional Water Board and USEPA a schedule of compliance for providing safeguards such that in the event of reduction,

loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order. The schedule of compliance shall, upon approval of the Regional Water Board, become a condition of this Order.

- k. The Discharger, upon written request of the Regional Water Board, shall file with the Board a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. This report may be combined with that required under Regional Water Board Standard Provision VI.A.2.m.

The technical report shall:

- i) Identify the possible sources of spills, leaks, untreated waste by-pass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
- ii) Evaluate the effectiveness of present facilities and procedures and state when they became operational.
- iii) Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

The Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions shall be incorporated as part of this Order, upon notice to the Discharger.

- l. A publicly owned treatment works (POTW) whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the Discharger shall notify the Regional Water Board by 31 January. A copy of the notification shall be sent to appropriate local elected officials, local permitting agencies and the press. Within 120 days of the notification, the Discharger shall submit a technical report showing how it will prevent flow volumes from exceeding capacity or how it will increase capacity to handle the larger flows. The Regional Water Board may extend the time for submitting the report.
- m. The Discharger shall submit technical reports as directed by the Executive Officer. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California

Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

- n. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Regional Water Board and USEPA.
- o. The Discharger shall conduct analysis on any sample provided by USEPA as part of the Discharge Monitoring Quality Assurance (DMQA) program. The results of any such analysis shall be submitted to USEPA's DMQA manager.
- p. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
- q. All monitoring and analysis instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy.
- r. The Discharger shall file with the Regional Water Board technical reports on self-monitoring performed according to the detailed specifications contained in the Monitoring and Reporting Program attached to this Order.
- s. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.
- t. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.
- u. For POTWs, prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (CWC section 1211).
- v. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, 1-hour average effluent limitation, or receiving water limitation contained in this Order, the Discharger shall notify the Regional Water Board by telephone (916) 464-3291