State Water Resources Control Board

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Arnold Schwarzenegger
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June 2, 2008

CERTIFIED MAIL AND EMAIL

Dan L. Gildor, Esq.
Environmental Law Foundation
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Dear Mr. Gildor:

PETITION OF ENVIRONMENTAL LAW FOUNDATION (WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2007-0064 [NPDES NO. CA0078867] FOR BERRY PETROLEUM COMPANY, POSO CREEK/MCVAN FACILITY, POSO CREEK OIL FIELD, KERN COUNTY), CENTRAL VALLEY WATER BOARD: BOARD MEETING NOTIFICATION
SWRCB/OCC FILE A-1871

Enclosed is a copy of the proposed order in the above-entitled matter. The State Water Resources Control Board (State Water Board) will consider this order at its meeting that will be held on *Tuesday, July 15, 2008,* commencing at *10:00 a.m.,* in the Coastal Hearing Room on the second floor of the Cal/EPA Building, 1001 I Street, Sacramento, California.

You will separately receive an agenda for this meeting.

At the meeting, interested persons will be allowed to comment orally on the draft order, subject to the following time limits. The petitioner, Environmental Law Foundation, discharger, Berry Petroleum Company and the Central Valley Regional Water Quality Control Board will each be allowed five minutes for oral comment, with additional time for questions by the State Water Board members. Other interested persons will be allotted a lesser amount of time to address the State Water Board. At the meeting, the State Water Board may adopt the draft order as written or with revisions, it may decide not to adopt the order, or it may continue consideration until a later meeting.

All comments shall be based solely upon evidence contained in the record or upon legal argument. Supplemental evidence will not be permitted except under the limited circumstances described in California Code of Regulations, title 23, section 2050.6. Written comments on the draft order and any other materials to be presented at the meeting, including power point and other visual displays, must be received by **12:00 p.m., July 2, 2008.** Please indicate in the subject line, comments to A-1871 - July 15, 2008 Board Meeting. Those comments must be addressed to:

Ms. Jeanine Townsend
Clerk to the Board
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Future correspondence regarding this matter will be sent in hard copy only to the addressees of this letter and to those persons whose names and addresses appear on this letter as receiving copies. All other interested persons who received copies of this letter may receive future correspondence on this matter via email by subscribing on the internet at http://www.waterboards.ca.gov/lyrisforms/swrcb_subscribe.html; the name of the electronic mailing list is A-1871 Environmental Law Foundation. In order to ensure that you receive all correspondence from this office concerning this matter, you should sign up as soon as possible. After 30 days from date of this letter, persons other than those whose names appear on this letter as recipients or cc's will be removed from our interested persons postal mailing list.

If there are any questions or comments, please contact Tim Regan, Senior Staff Counsel, in the Office of Chief Counsel, at (916) 341-5172 or email TRegan@waterboards.ca.gov.

Sincerely,

Michael A.M. Lauffer
Chief Counsel

Enclosure

cc: **All w/enclosure and w/o ip list**

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Interested Persons

Inter-Office Service List **[via email only]**

Continued next page

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DRAFT

June 2, 2008

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2008-

In the Matter of the Petition of

THE ENVIRONMENTAL LAW FOUNDATION

For Review of Waste Discharge Requirements Order No. R5-2007-0064
[NPDES No. CA0078867] for Berry Petroleum Company, Poso Creek/Mcvan Facility
Issued by the
California Regional Water Quality Control Board,
Central Valley Region

SWRCB/OCC FILE A-1871

BY THE BOARD:

In this order, the State Water Resources Control Board (State Water Board) remands a National Pollutant Discharge Elimination System (NPDES) permit to the Central Valley Regional Water Quality Control Board (Central Valley Water Board) for revisions. The Environmental Law Foundation (Petitioner) contends that the Central Valley Water Board failed to properly implement the state's antidegradation policy and violated the Clean Water Act's antibacksliding rule by including less stringent effluent limitations in the permit as compared to the previous permit.

The Board has reviewed the record before the Central Valley Water Board and concludes that the permit should be remanded to the Central Valley Water Board for reconsideration and revisions to address antibacksliding and antidegradation issues.[1]

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[1] To the extent Petitioner raised issues not discussed in this order, such issues are hereby dismissed as not substantial or appropriate for review by the State Water board. (See *People v. Barry* (1987) 194 Cal.App.3d 158, 175-177 [239 Cal.Rptr. 349], *Johnson v. State Water Resources Control Board* (2004) 123 Cal.App.4th 1107 [20 Cal.Rptr.3d 441], Cal. Code Regs., tit. 23, § 2052, subd. (a)(1).)

I. BACKGROUND

The Berry Petroleum Company (Discharger) owns and operates a crude oil recovery facility in eight oil field leases at the Poso Creek/McVan Facility. The Poso Creek Oil Field is owned and managed by the U.S. Department of Interior, Bureau of Land Management. The oil field is approximately 10 miles north of Bakersfield. Average annual precipitation in the area is less than 7 inches and average annual evaporation exceeds 80 inches. Oil and water produced from each wellhead is brought to the facility via a pipeline. The Discharger currently operates 85 active wells that collectively produce approximately 1,000 barrels of oil per day and 45,000 barrels of water per day. The crude oil recovery process generates produced water (wastewater) that is treated and discharged within the lease area. The treatment system consists of mechanical separation, sedimentation, and air flotation with polymer addition to enhance clarification.

Treated wastewater is discharged to an unnamed ephemeral stream that flows naturally only during heavy rain events. The stream channel extends approximately two miles south from the discharge point to its confluence with Poso Creek. Poso Creek is part of the Poso Watershed.[2] In accordance with the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan), the ephemeral stream is a Valley Floor Water. For Valley Floor Waters in the Tulare Lake Basin, the designated uses are agricultural supply (AGR), industrial service supply (IND), industrial process supply (PRO), water contact recreation (REC-1), non-contact water recreation (REC-2),warm freshwater habitat (WARM), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), and ground water recharge (GWR). Poso Creek is also a receiving water for the discharge and the beneficial uses for Poso Creek include all of the

[2] The Poso Watershed is one of four "minor stream" watersheds that provide the second largest source of surface water for the Tulare Lake Basin, after the Kern River. In 1998, the Poso Watershed provided about 163,100 acre-feet of water to the Tulare Lake Basin.

above uses as well as cold freshwater habitat (COLD) and freshwater replenishment (FRSH). Groundwater is estimated to be 550 feet below ground surface in the discharge area.

The facility has been governed by a succession of NPDES permits since at least 1974. The 1974 permit was amended in 1983 to incorporate an increase in the design capacity of the wastewater treatment system from 0.05 million gallons per day (mgd) to 1.68 mgd. The increase in capacity was allowed in anticipation of an operational change to enhanced oil recovery steam flood operations (steam flooding). The 1995 permit retained the same maximum flow. The 2001 Permit[3] included a maximum effluent flow limitation of 0.42 mgd at the request of Wildcat Energy, the discharger at the time. The request to reduce the flow limitations reflected actual facility operations and resulted in a lower annual permit fee[4]. Under typical weather conditions during the term of the 2001 Permit, flow in the stream channel terminated approximately 900 feet downstream from the discharge point.

In 2003, the Discharger began operating the lease, and submitted a Report of Waste Discharge that reflected its intent to reintroduce steam flooding and to expand oil production.[5] It requested an increased discharge limit of 1.68 mgd of treated wastewater.

In order to explain the Petitioner's contentions and the revisions to the maximum flow throughout the various permits, we will briefly review the process of steam flooding and its impacts on discharges from the facility. Steam flooding is a process whereby continuous steam injection heats large portions of the underground oil reservoir. Steam flooding is a displacement process similar to water flooding, but steam flooding achieves the most efficient recovery of heavy oils. Steam is pumped into injection wells, which in some cases are

[3] Waste Discharge Requirements Order No. 5-01-133 [NPDES No. CA0078867] (the "2001 Permit").

[4] Because of low oil prices, the facility apparently had not employed steam flooding for at least several years preceding issuance of the 2001 Permit.

[5] The catalyst for this proposal was apparently increased oil prices.

artificially fractured to increase reservoir permeability, and the oil is displaced to production wells.

On June 22, 2007, the Central Valley Water Board adopted NPDES Permit No. CA0078867/Waste Discharge Requirements (WDRs) Order No. R5-2007-0064 (Permit) to regulate the discharge. The Permit authorizes an increase, from 0.42 mgd to 1.68 mgd, in the maximum flow of wastewater to be discharged to the ephemeral stream. The ephemeral stream and Poso Creek are both waters of the United States subject to protection under the Clean Water Act. The Petitioner filed a timely petition seeking review by the State Water Board.

The following table lists the NPDES permits for the facility and their respective limitations with regards to flow, electrical conductivity (EC), chloride and boron. EC is a measure of salinity.

NPDES Permit	Flow limit	EC limit	Chloride limit	Boron limit
2007 Permit	1.68 mgd	1000 µmhos/cm	175 mg/L	1.0 mg/L
2001 Permit	0.42 mgd	700 µmhos/cm	106 mg/L	0.75 mg/L
1995 Permit	1.68 mgd	1000 µmhos/cm	175 mg/L	1.0 mg/L
1974 Permit after 1983	1.68 mgd	1000 µmhos/cm	200 mg/L	1.0 mg/L
1974 Permit before 1983	0.05 mgd	----------	----------	----------

The Central Valley Water Board based the effluent limitations in the 1974 permit, 1995 permit and 2007 Permit on its Basin Plan, which establishes maximum effluent limitations for surface water discharges.[6] The 2001 Permit established more stringent effluent limitations, which were based on agricultural water quality goals from a United Nations study[7] contained in a Central Valley Water Board staff document entitled "A Compilation of Water Quality Goals." The Basin Plan recognizes that the Compilation may be used to interpret narrative objectives.[8]

[6] See Basin Plan, Chapter IV (Implementation Plan).

[7] See "Water Quality for Agriculture" by Ayers and Westcot, Food and Agriculture Organization of the United Nations (1985).

[8] See Basin Plan, page IV-22.

The Discharger began steam flooding in 2004, without waiting for adoption of the Permit in 2007, and was able to comply with the flow limits in the 2001 Permit by discharging to injection wells excess flows above limits contained in the 2001 Permit.[9] The Discharger was also in compliance with the concentration limits in the 2001 Permit.

The Environmental Law Foundation contends that the Central Valley Water Board, in adopting the Permit, failed to properly implement state and federal antidegradation requirements and violated the Clean Water Act's antibacksliding rule by reinstating the less-stringent pollutant limitations and increasing the flow limit to 1.68 mgd.

A. NPDES Permit Program

The Federal Water Pollution Control Act, commonly referred to as the Clean Water Act,[10] was enacted in 1972. It established the NPDES permit program.[11] Under this program, it is illegal to discharge pollutants from a point source[12] to waters of the United States except in compliance with an NPDES permit.[13] Either the U.S. Environmental Protection Agency (EPA) or states with EPA-approved programs are authorized to issue permits. California has an approved program.

NPDES Permits must include technology-based effluent limitations, as well as any more stringent limitations necessary to meet water quality standards.[14] Water quality standards, as defined in Clean Water Act section 303(c),[15] consist of the designated uses of a

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[9] See March 10, 2004 letter from the Department of Conservation to Berry Petroleum approving disposal of up to 1.05 mgd.

[10] 33 U.S.C. § 1251 et seq.

[11] See *id.* § 1342.

[12] A "point source" is "any discernible, confined and discrete conveyance", such as a pipe, ditch, channel, tunnel, conduit, or well. (*Id.*, § 1362(14).)

[13] *Id.* §§ 1311, 1342.

[14] *Ibid.*

[15] *Id.* § 1313(c).

water body and criteria to protect those uses.[16] The criteria can be either narrative or numeric.[17]

In California, water quality standards are found in statewide and regional water quality control plans.[18] Water quality control plans contain beneficial use designations, water quality objectives to protect those uses, and a program to implement the objectives.[19] Beneficial uses and water quality objectives are the respective state equivalents of federal designated uses and criteria under Clean Water Act section 303(c).[20] Water quality standards must also include an antidegradation policy.[21] State Water Board Resolution No. 68-16 reflects California's antidegradation policy.[22]

B. Section 303(d)

In addition to providing the basis for deriving effluent limitations in NPDES permits, water quality standards also provide the foundation for identifying impaired waters. Clean Water Act section 303(d)[23] requires that the states identify and establish a priority ranking for all waters for which technology-based effluent limitations are not stringent enough to attain and maintain water quality standards. Poso Creek has not been identified as an impaired waterbody.

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[16] EPA regulations define water quality standards to also include an antidegradation policy. (See 40 C.F.R. § 131.6.)

[17] 40 C.F.R. § 131.3(b) ("[*C*]*riteria* are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use.")

[18] Wat. Code, §§ 13170, 13170.2, 13240-13247.

[19] *Id.* § 13050, subd. (j).

[20] Compare Wat. Code, § 13050, subd. (h) with 40 C.F.R. § 131.3(b); see also State Water Board Order No. WQ 94-8, fn. 12.

[21] See 33 U.S.C. § 1313 and 40 C.F.R. § 131.6.

[22] State Water Board Order No. WQ 90-5.

[23] 33 U.S.C. § 1313(d).

C. Antibacksliding

For water quality-based effluent limitations, such as those at issue, Clean Water Act section 402(o) prohibits reissuing or modifying a permit to include effluent limitations less stringent than those in the previous permit, unless certain exceptions are met. This prohibition is commonly known as the antibacksliding rule. There are two sets of exceptions to the antibacksliding rule for water quality-based limits – one in Clean Water Act section 303(d)(4) and the other in section 402(o)(2). EPA has consistently interpreted Section 402(o) to allow relaxation of effluent limitations if *either* of the requirements of sections 303(d)(4) or 402(o)(2) are met.[24] These two subsections contain independent exceptions to the prohibition.

The exceptions in section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list. For waters in attainment, such as Poso Creek, section 303(d)(4) allows relaxation of a water quality-based effluent limitation if the less stringent limit is consistent with federal antidegradation regulations and the State antidegradation policy.[25] Even if an antibacksliding exception applies, however, the new limit cannot result in an exceedance of a water quality standard.[26] The Central Valley Water Board did not rely upon the section 303(d)(4) antibacksliding exception.

There are several exceptions to the antibacksliding rule that are provided under Clean Water Act section 402(o). The two exceptions relied upon by the Central Valley Water Board are as follows:

> A permit . . . may be renewed . . . to contain a less stringent effluent limitation applicable to a pollutant if--

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[24] See, e.g., the discussion in the *Water Quality Guidance for the Great Lakes System: Supplementary Information Document* (SID) (EPA-820-B-95-001) (Mar. 1995), p. 43.

[25] See 40 C.F.R. § 131.12 and State Water Board Resolution No. 68-16.

[26] 33 U.S.C. 1342(o)(3).

(A) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;

(B) . . . (ii) the Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under subsection (a)(1)(B) of this section;[27]

II. CONTENTIONS AND FINDINGS

A. Antibacksliding

1. Material and Substantial Facility Changes

Contention: The Petitioner contends that there is no evidence in the record to suggest that the use of steam flooding constitutes a facility change that justifies less stringent pollutant limitations and, therefore, that the issuance of the Permit with less stringent pollutant limitations than in the 2001 Permit violates the antibacksliding rule.

Discussion: We agree with the Petitioner. The "material and substantial alteration" exception to the antibacksliding rule may only be considered if there have been "material and substantial alterations or additions to the permitted facility [that have] occurred *after* permit issuance."[28] The facility alterations to allow steam flooding were made before the more stringent 2001 Permit was issued, not after, and were first authorized in the 1983 permit. Consequently, the exception does not apply here.

2. Technical or Legal Mistakes

Contention: Petitioner asserts that it was inappropriate for the Central Valley Water Board to rely upon the "technical or legal mistake" exception to the antibacksliding rule.

Discussion: We agree with Petitioner's conclusion, but not with its reasoning. Petitioner argues the Central Valley Water Board failed to prove that a mistake occurred when it

[27] *Id.* § 1342(o)(2).

[28] 33 U.S.C. 1342(o)(2).

issued the 2001 Permit. However, it is irrelevant whether or not a mistake occurred, because the Central Valley Water Board response to the petition correctly notes that it inappropriately relied on the "mistake" exception. This exception applies only to effluent limitations based on "best professional judgment," i.e., limits based on Clean Water Act section 402(a)(1)(B) for technology-based limitations. The 2001 Permit effluent limitations in question are water quality based, in that they were intended to protect the agricultural supply beneficial use. Therefore the exception, on its face, is not applicable.

While a "mistake" cannot constitute the basis for an exception to the antibacksliding rule in this case, we do wish to comment on the propriety of the effluent limitations at issue. This could be significant in other permits, because it appears the Central Valley Water Board may have concluded that application of the 700 µmhos/cm EC limit (and the other salt limitations) was a mistake based on its reading of State Water Board Order No. WQO 2004-0010.[29] In that order, the State Water Board concluded that: "the 700 µmhos/cm EC value cannot be interpreted as an absolute value. Rather, the Regional Board must determine whether site specific conditions applicable to Woodland's discharge allow some relaxation in this value."[30] A 700 µmhos/cm EC limitation is not per se impermissible or a mistake. An effluent limitation based on 700 µmhos/cm EC may be appropriate in this and other circumstances, but the limitation requires consideration of site-specific factors. The State Water Board has also consistently concluded that regional water quality control boards must include effluent limitations, necessary to protect a beneficial use, that are more stringent than limitations based on basin plan numeric objectives if it makes appropriate findings that are supported by the evidence.[31]

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[29] In the Matter of Own Motion Review of City of Woodland Waste Discharge Requirements.

[30] *Id* at p. 7.

[31] See e.g., State Water Board Order Nos. WQ 94-8, 95-4, 2001-16, and 2006-001.

3. ANTIBACKSLIDING EXCEPTION UNDER CLEAN WATER ACT SECTION 303(D)

As noted above, for waters in compliance with water quality objectives, such as Poso Creek, section 303(d)(4) allows relaxation of a water quality-based effluent limitation if the less stringent limitation is consistent with federal antidegradation regulations and the State antidegradation policy. Although the Central Valley Water Board improperly relied upon the section 402(o) antibacksliding exceptions, it did not make findings regarding the section 303(d)(4) exception. This latter exception does provide independent grounds for relaxing effluent limitations, but only if the change is consistent with antidegradation requirements. The applicability of this exception is discussed in the following section.

B. Antidegradation

1. LESS STRINGENT POLLUTANT LIMITATIONS

With respect to the issue of whether the higher pollutant concentration limits are consistent with the federal and state antidegradation requirements, the Central Valley Water Board must on remand first characterize the pollutant concentrations in the background flows in the ephemeral receiving water to determine whether this background quality is higher than necessary to support beneficial uses.[32] Assuming the background concentrations are lower than applicable water quality objectives and the quality is otherwise higher than necessary to protect all beneficial uses, this higher quality must be maintained unless any lowering in quality is consistent with the State Water Board's Antidegradation Policy and the federal antidegradation regulations.[33]

The federal antidegradation regulations require that:

> Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife . . . that quality shall be maintained and protected unless the State finds . . . that allowing lower water quality is

[32] See 40 C.F.R. § 131.12 and State Water Board Resolution No. 68-16.

[33] *Id.*

necessary to accommodate important economic or social development in the area in which the waters are located.[34]

Historical monitoring data (1986-2000) of the discharged treated wastewater show the following levels for EC, chloride, and boron:[35]

Constituent	2001 Limit	Sep 1986	Sep 1992	Nov 1992	Mar 1993	May 1997	Apr 1998	Jun/Dec 2000
EC (µmhos/cm)	700	430	415	400	---	---	390	365/364
Chloride (mg/L)	106	60	43	51	51.4	35	49	44/45
Boron (mg/L)	0.75	0.16	0.3	0.14	0.172	0.2	0.12	0.11/<0.10

More recent data specifically gathered to distinguish discharges when the steam flooding process was used show the following levels for EC, chloride, and boron:

Constituent	2001 Limit	Aug 2003-Mar 2004 No Steam flooding (8 samples)		Apr 2004-Sep 2006 Using Steam flooding (31 samples)	
		Range	Average	Range	Average
EC (umhos/cm)	700	145-328	285	312-436	357
Chloride (mg/L)	106	47.5-55	50.6	50-86.2	61.5
Boron (mg/L)	0.75	0.05-0.1	0.08	0.09-0.37	0.2

As noted above, relevant provisions of the Clean Water Act afford an exception to antibacksliding if "material and substantial alterations or additions to the permitted facility occurred after permit issuance which *justify* the application of a less stringent effluent limitation."[36] None of the data collected since 1986 exceed or appear to approach the more stringent 2001 Permit limits, which were established for protection of the agricultural supply beneficial use, even when the Discharger employed steam flooding.

The Central Valley Water Board's response to the petition notes: "Historic EC results of production water from this field have varied and once reached 900 µmhos/cm." Review of the record shows that the only result with this value was found in a lab analysis of a

[34] See 40 C.F.R. § 131.12(a)(2). Waters described in Section 131.12(a)(2) are known as "Tier II" waters. Where water quality is not better than necessary to protect designated uses, these waters are known as "Tier I" waters for which Section 131.12(a)(1) requires that: "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

[35] It is not clear from the record which of these data were collected while the process of steam flooding was used.

[36] 33 U.S.C. § 1342(o)(2)(A) (emphasis added).

sample taken out of Sump 3 in 1977, before the addition of the current wastewater treatment system. Moreover, it is not clear if, in 1977, discharges took place directly out of Sump 3 as it occurs now (after going through some treatment). Therefore, it is questionable whether this value is representative of current discharge conditions, even if steam flooding is employed. Consequently, this one sample does not demonstrate that it is necessary to relax the pollutant limitations.

As discussed above, the Discharger has demonstrated that, under its current and historical operations, it can comply with the more stringent limitations. Therefore, for the Central Valley Water Board to grant an exception to the antibacksliding rule, it would have to explain why it is necessary to relax these limitations to accommodate important social and economic development in the discharge area, as required by federal antidegradation requirements. This is an issue the Central Valley Water Board may evaluate on remand. Any determination must address both whether the anticipated future discharges are likely to violate the prior permit limitations and the important social and economic needs.

The State Water Board's Antidegradation Policy provides that:

> Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.[37]

If the background characterization indicates that the high quality conditions discussed above exist, the Central Valley Water Board must also explain why relaxation of pollutant concentrations for EC, chloride, and boron is consistent with the maximum benefit to the people of the State. The Central Valley Water Board Response to the Petition argues that it need not evaluate these limitations for consistency with federal or state antidegradation

requirements because the Central Valley Water Board considered these requirements when it adopted the Basin Plan effluent limitations that were included in the Permit.[38] This reasoning is not persuasive because the Basin Plan effluent limitations are minimum standards and do not preclude the adoption of more stringent effluent limitations if necessary to protect beneficial uses affected by a particular discharge.

2. POTENTIAL EFFECTS OF FLOW INCREASE

Contention: Petitioner asserts that altering the flow of an ephemeral stream by addition of treated wastewater can be detrimental to species that respond to the ephemeral nature of the stream and that the Central Valley Water Board did not consider this issue sufficiently in the Permit's antidegradation analysis.

Discussion: The argument is premised on the assumption that water quality encompasses more than just pollutant concentrations in the water column and includes also the physical ability of the waterbody to support beneficial uses based on increases or decreases in flow. Although we accept this broad view of water quality, the administrative record does not demonstrate that an increase in flow resulting from steam flooding would cause significant adverse impacts on beneficial uses that may exist and depend on ephemeral stream conditions for survival. The reason for this is that with an average annual precipitation rate in the area of less than 7 inches and average annual evaporation that exceeds 80 inches, it is likely that the receiving water tributary, either before or after its confluence with Poso Creek, will provide abundant ephemeral stream habitat.

The Petitioner basically claims that the Central Valley Water Board was obligated to conduct a more thorough study to determine if the tributary and creek do support habitat that would be detrimentally affected by an increase in wastewater flows. The Permit notes that

[37] State Water Board Resolution No. 68-16, ¶ 2.

[38] Central Valley Water Board Response to the Petition, November 16, 2007, page 6.

during a wet season inspection, when the tributary nearly reached Poso Creek before percolating and evaporating, Poso Creek itself also dried up just downstream of its confluence with the tributary.[39] The Central Valley Water Board response to the petition asserts that there is no evidence in the record to support the argument that increased discharges will negatively affect the unnamed tributary and that higher discharge rates have occurred in the past without any observed problems. It is not clear from the record the level of any analysis that was performed. Because this matter is being remanded, we recommend that the Central Valley Water Board clarify the basis for its determination that there will not be impacts caused by flow

III. CONCLUSIONS

Based on the above discussion, the Board concludes that:

1. There have not been any "material and substantial alterations or additions to the permitted facility [that have] occurred *after* permit issuance." The facility alterations to allow steam flooding were made before the more stringent 2001 Permit was issued, not after, and were first authorized in the 1983 permit. Consequently, this antibacksliding exception does not apply.

2. The "technical or legal mistake" exception to the antibacksliding rule applies only to technology-based limitations, and therefore cannot be a basis for relaxing the water quality-based pollutant limitations in the 2001 Permit.

3. The Central Valley Water Board must explain why it is necessary to relax EC, chloride, and boron effluent limitations to accommodate important social and economic development in the discharge area.

[39] Permit Fact Sheet at p. F-12

4. The Central Valley Water Board must explain why relaxation of effluent limitations for EC, chloride, and boron is consistent with the maximum benefit to the people of the State.

5. The Central Valley Water Board should clarify the basis for its determination that an increase in flow will not adversely affect beneficial uses.

IV. ORDER

IT IS HEREBY ORDERED that, for the reasons discussed above, Waste Discharge Requirements Order No. R5-2007-0064 is remanded to the Central Valley Water Board for reconsideration and revision, consistent with this order.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on XXX xx, 2008.

AYE:

NO:

ABSENT:

ABSTAIN:

DRAFT

Jeanine Townsend
Clerk to the Board