

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0161
SPECIAL ORDER
TO MODIFY
WASTE DISCHARGE REQUIREMENTS
ORDER NO. 5-01-105
FOR
CITY OF BAKERSFIELD
WASTEWATER TREATMENT PLANT NO. 3
KERN COUNTY

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

1. Waste Discharge Requirements (WDRs) Order No. 5-01-105, adopted on 27 April 2001, authorizes the City of Bakersfield (hereafter Discharger or City) to discharge 16.0 million gallons per day (mgd) of municipal wastewater from Wastewater Treatment Plant No. 3 (WWTP No. 3) to agricultural land.
2. Discharge Specification B.2 of WDRs Order No. 5-01-105 prescribes, in part, the following discharge limits for 5-day biological oxygen demand (BOD₅) and 5-day carbonaceous biological oxygen demand (CBOD₅):

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅	mg/L	40	80
CBOD ₅	mg/L	35	70

In addition, Discharge Specification B.2 contains a footnote stating that "[t]he Discharger may analyze for either BOD₅ or CBOD₅ to demonstrate compliance with secondary treatment requirements." The previous WDRs regulating the facility (Order No. 88-167) also contained the option to demonstrate compliance with either a CBOD₅ or a BOD₅ limitation.

3. Discharge Specification B.3 of WDRs Order No. 5-01-105 prescribes, effective **15 April 2005**, only the BOD₅ limit, discontinuing use of CBOD₅ as an indication of compliance with secondary treatment requirements.
4. The CBOD₅ laboratory method inhibits nitrogenous oxygen demand and therefore the analytical results are always less for CBOD₅ analyses than any corresponding BOD₅ analyses. Use of CBOD₅ is inconsistent with the Basin Plan implementation plan for municipal discharges in excess of 1.0 mgd.
5. Average monthly BOD₅ and CBOD₅ concentrations since January of 1999 are 47.1 mg/L and 23.7 mg/L, respectively. The most recent self-monitoring reports indicate that the Discharger consistently complies with the CBOD₅ limitation, but cannot meet the BOD₅ Basin Plan implementation plan.

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6. Provisions F.11, F.12, and F.13 prescribe deadlines by which the Discharger must submit technical reports that set forth a schedule for completing a systematic and comprehensive evaluation of each waste treatment and control component of WWTP No. 3. The purpose of the evaluation is to assess the extent to which the Discharger practices and implements best practicable treatment control (BPTC) to minimize the degradation of receiving water quality. On 3 May 2002 the Discharger submitted a technical report to satisfy Provision F.11. Provision F.12 requires the Discharger to submit the evaluation and proposed time schedule for completing the BPTC modifications by **1 July 2003**. Provision F.12 requires that the proposed schedule be as short as possible and, unless authorized by the Regional Board, no more than four years beyond the completion date of the initial BPTC evaluation. Provision F.13 requires the Discharger to submit a report proposing revised groundwater limitations, based on the results of the BPTC evaluation, by **1 July 2004**.
7. The Discharger indicates that it was not able to meet the 1 July 2003 deadline and that it may not be possible to complete the BPTC evaluation until 2006. Causes for the delay involve unanticipated time necessary to develop and then modify the evaluation work plan, unanticipated time required for collection of substantial background data necessary to perform the evaluation, and budget constraints.
8. When WDRs Order No. 5-01-105 was adopted, the Discharger indicated its intent to spend \$7 to \$8 million dollars in modifications to WWTP No. 3 to achieve compliance with the BOD₅ limit by April 2005 and that, in the interim, the Discharger would evaluate and implement BPTC.
9. The Discharger now indicates that due to the rapid rate of recent and projected growth, the City is planning and budgeting for a \$26 million, 8.0 mgd expansion of WWTP No. 3. The Discharger proposes to address compliance with the BOD₅ limit; evaluate, complete, and implement BPTC; and design, finance, and construct the proposed 8.0 mgd expansion concurrently, as part of a single capital improvement project, to be completed by 2010.
10. The Discharger reports the task of funding multiple WWTP improvement projects is burdensome, and that it could realize a reduction in overall costs by combining the improvements necessary to achieve compliance with the BOD₅ limitation, to implement BPTC, and to expand WWTP No. 3.
11. Accordingly, the Discharger requests that: the implementation date prescribed by Discharge Specification B.3 of WDRs Order No. 5-01-105 be delayed until **15 April 2010**; the deadline for submittal of the BPTC evaluation required by Provisions F.12 be delayed until **1 July 2006**, with a corresponding extension of the four-year limit on the subsequent time schedule; and the deadline for submittal of a report proposing revised groundwater limitations be delayed until **1 July 2007**.

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12. Given the Discharger's compliance history, its good faith effort thus far to comply with Provisions F.11, F.12, and F.13 of WDRs Order No. 5-01-105, and the potential cost savings to the ratepayers discharging to WWTP No. 3, it is reasonable and in the public interest to modify the abovementioned deadlines.
13. The Discharger and interested agencies and persons were notified of the Regional Board's intent to modify WDRs Order No. 5-01-105 and provided an opportunity for a public hearing and to submit written views and recommendations.
14. In a public hearing on 17 October 2003, all comments pertaining to the modification of WDRs Order No. 5-01-105 were heard and considered.
15. The action to amend Waste Discharge Requirements Order No. 5-01-105 is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the California Water Code.

IT IS HEREBY ORDERED, pursuant to sections 13263, 13267, and 13377 of the California Water Code, that Waste Discharge Requirements Order No. 5-01-105 is modified as follows:

- A. Discharge Specification B.3:** The effective date of **15 April 2005** is now **15 April 2010**.
- B. Provision F.12:** The deadline of **1 July 2003** is now **1 July 2006**. The time schedule proposed for implementation of BPTC will not exceed four years (i.e., 2010).
- C. Provision F.13:** The deadline of **1 July 2004** is now **1 July 2007**.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 17 October 2003.

Original signed by

THOMAS R. PINKOS, Executive Officer

JRL:jrl:10/17/03

INFORMATION SHEET

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TO MODIFY
WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-01-105
CITY OF BAKERSFIELD
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The Regional Board adopted Waste Discharge Requirements (WDRs) Order No. 5-01-105 on 27 April 2001 authorizing the City of Bakersfield (hereafter Discharger) to discharge 16.0 million gallons per day (mgd) of municipal wastewater from Wastewater Treatment Plant No. 3 (WWTP No. 3) to agricultural land.

BEST PRACTICABLE TREATMENT AND CONTROL

Provisions F.11, F.12, and F.13 of WDRs Order No. 5-01-105 prescribe deadlines by which the Discharger must submit technical reports that set forth a schedule for completing a systematic and comprehensive evaluation of each waste treatment and control component of WWTP No. 3. The purpose of the evaluation is to assess the extent to which the Discharger practices and implements best practicable treatment control (BPTC) to minimize the degradation of receiving water quality. Provision F.12 requires the Discharger to identify the source of funding and proposed schedule for completing the BPTC modifications to WWTP No. 3 by **1 July 2003**. Provision F.12 requires that the proposed schedule be as short as possible and, unless authorized by the Regional Board, in no case shall exceed four years beyond the completion date of the initial BPTC evaluation.

BOD₅

The Basin Plan requires that WWTP No. 3 provide removal of 80 percent or reduction to 40 mg/L, whichever is more restrictive, of BOD₅. Discharge Specification B.1 of WDRs Order No. 5-01-105 prescribes discharge requirements that allow the Discharger to substitute CBOD₅ to demonstrate compliance with the Basin Plan performance standards. Discharge Specification B.3 of WDRs Order No. 5-01-105 prescribes discharge requirements that require the Discharger to comply with the Basin Plan by **15 April 2005**.

In 1999 and 2000, WWTP No. 3 effluent BOD₅ averaged 47 mg/L and 45 mg/L, respectively. In 2001, prior to the adoption of WDRs Order No. 5-01-105, the Discharger indicated that WWTP No. 3 could not achieve the Basin Plan objective of 40 mg/L for BOD₅. The most recent self-monitoring reports continue to indicate that the Discharger consistently complies with the interim CBOD₅ limitation, but not the Basin Plan criteria for BOD₅.

In a 25 November 2002 letter, the Discharger requested that the implementation date of 15 April 2005 prescribed by Discharge Specification B.3 of WDRs Order No. 5-01-105 be delayed until 15 April 2010 to facilitate a single capital improvement project. By 15 April 2010, such a project would bring WWTP No. 3 into full compliance with the BOD₅ Basin Plan objective and also incorporate facility upgrades determined from the BPTC evaluation.

As modifications for BPTC and BOD₅ compliance are associated and a single project is more cost effective, the amendment proposes to modify dates for compliance with Provision Nos. F.12 and F.13 and the date of compliance with Discharge Specification B.3 from 15 April 2005 to 15 April 2010.