

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 5-01-130  
NPDES NO. CA00883399

WASTE DISCHARGE REQUIREMENTS  
FOR THE COUNTY OF KERN  
AND  
THE CITY OF BAKERSFIELD  
FOR  
URBAN STORM WATER DISCHARGES

KERN COUNTY

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

1. Medium sized municipalities (those with a population greater than 100,000 but less than 250,000) that discharge storm water through municipal storm sewer systems to waters of the United States require a National Pollutant Discharge Elimination System (NPDES) Permit to regulate storm water discharges, pursuant to Section 122.26(a)(iv) of Title 40 of the Code of Federal Regulations (40 CFR). The City of Bakersfield was defined as a “medium sized municipality,” in Appendix G to Part 122, 40 CFR. The urbanized area of the County of Kern surrounding Bakersfield was also defined as a “medium sized municipality” in Appendix I to Part 122, 40 CFR.
2. Waste Discharge Requirements Order No. 94-164 (NPDES No. CA00883399) was adopted on 24 June 1994 and issued to the County of Kern (County) and the City of Bakersfield (City) for the discharge of Urban Storm Water. The County and the City are hereafter jointly referred to as “Discharger” and individually as “Permittees.”
3. The Discharger owns, operates, and maintains a storm drainage system serving Bakersfield and a portion of the surrounding unincorporated area.
4. As part of the Discharger’s renewal application submitted 29 December 1998, the Discharger submitted a revised Storm Water Management Plan (SWMP), which included the following elements.
  - Maintenance of Structural Controls
  - Controls for New Development and Significant Redevelopment
  - Operation and Maintenance of Roads, Streets, and Highways
  - Control for Landfills and Other Treatment, Storage, or Disposal Facilities
  - Illicit Discharge Controls
  - Spill Prevention, Containment and Response Procedures
  - Illegal Dumping Controls
  - Leaking Sanitary Sewage Controls
  - Storm Drain Systems Inspections and Control Measures

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- A Monitoring Program of Industrial Activities
  - Site Planning Procedures
  - Structural and Non-Structural BMPs
  - Identifying Site Inspection Priorities and Enforcing Control Measures
  - Education and Training Activities Programs
5. The revised SWMP and any approved modifications or revisions are incorporated herein by reference and made an integral and enforceable part of this Order.
  6. The Bakersfield Metropolitan Area is shown in Attachment 1. Much of the storm water runoff from the Bakersfield Metropolitan Area is directed to one of the approximately 200 retention basins in the area. However, some runoff is directed to either the Kern River or canals. Those urban drainage watersheds that do discharge to receiving water are shown in Attachment 2. Locations of outfalls that correspond with the drainage basins are listed in Attachment 3.
  7. Urban runoff is discharged to the Kern River and to various canals of the Tulare Lake Basin. All of these waters are considered waters of the United States. The Board adopted the *Water Quality Control Plan for the Tulare Lake Basin*, second edition, (hereafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains plans and policies for all waters of the Basin. These requirements implement the Basin Plan.
  8. The Basin Plan designates the beneficial uses of the Kern River as municipal, domestic, industrial service, industrial process, and agricultural supply; water contact and noncontact water recreation; warm freshwater, wildlife, and rare, threatened, or endangered species habitat; and groundwater recharge.
  9. The receiving water canals are considered Valley Floor Waters with the following beneficial uses: agriculture, industrial service, and industrial process supply; water contact and noncontact water recreation; warm freshwater, wildlife, and rare, threatened, or endangered species habitat; and groundwater recharge.
  10. Detention basins serve approximately 40% of the drainage area that discharge to receiving waters. Detention of storm water in storm water basins is an accepted treatment method. However, the effectiveness of detention on removing pollutants from effluent water varies depending on a number of factors, including constituent characteristics and basin design.
  11. As part of their SWMP, the Discharger addresses Illicit Discharge Controls. In the 1999 Annual Report, the Discharger reported receiving 2646 complaints regarding illegal dumping. A list of Hazardous Materials Spills indicated that many of the spills were results of illegal dumping. The Discharger also reported that as a result of cleaning storm water basins, 16 truckloads of non-vegetative debris were removed during the 1998/1999 reporting year and 35 truckloads were removed during the 1997/1998 reporting year.
  12. Section 402(p)(3)(B)(iii) of the Federal Clean Water Act requires “controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions...”

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13. Several of the MS4 permits for areas around the state that are on their second term contain or have given consideration to Standard Urban Storm Water Mitigation Plans (SUSMPs) for specific categories of new development and redevelopment. In general, SUSMPs require structural controls to infiltrate or treat runoff from specified storm events, and recommend or require other BMPs. The State Board has found that such provisions constitute reduction of pollutants to the maximum extent practicable. An example of a general SUSMP is in Attachment 4 of this Order.
14. The County requires that new developments in the Bakersfield metropolitan area that cannot be served by the existing MS4 include retention basins to contain and infiltrate runoff from the development. New developments that can be served by the existing MS4 discharge storm water to the existing system. Due to the growth patterns of the Bakersfield area, the County has estimated that over 90% of new development occurs in unsewered areas and therefore 90% of runoff from new development is not discharged to waters of the U.S.
15. The City of Bakersfield requires that most new developments include retention basins designed to contain run-off produced by the 100-year, 24-hour storm event and capable of draining by percolation or evaporation within seven days. In cases where retention basins cannot be used, the City requires that developments include detention basins. The retention or detention basins become part of the MS4 subject to this permit.
16. Board staff inspections in the area of Bernard Street and Alta Vista Drive in Bakersfield on 14 and 23 August 2000, prompted by an odor complaint, revealed that domestic sewage had been discharged to the MS4 and that the drainage facilities were not well maintained.
17. The Discharger implements a monitoring program to sample two storm events at three discharge points each year. The discharge locations represent three different types of drainage areas: residential, commercial, and industrial. Runoff from the industrial area, the North Chester sampling location, consistently contains zinc concentrations that are higher than those reported as typical in the National Urban Runoff Program study.
18. In its reapplication, the Discharger proposed amendments to the following two sections of the SWMP: Receiving Water Monitoring and Control of Pesticides and Herbicides.
19. The Discharger proposes the addition of an alternate receiving water sampling station. Because of water diversions to agricultural supply canals, the Discharger has experienced no flow or too little flow to allow water sampling at the downstream water monitoring station at Truxtun Extension and Coffee Road. The Discharger proposes that Calloway Headgate be designated as an alternate station if the Coffee Road station is not suitable for sampling. The Calloway Headgate is an acceptable downstream sampling location. The Calloway Headgate location is more likely to have Kern River flows during the storm water-monitoring season. Although this is only a portion of total storm water discharges to receiving waters, because it is prior to canal diversions within the permitted area, pollutant loading in receiving waters should be more easily identified.
20. The Discharger also proposes to eliminate the pesticide and herbicide control program and annual reporting of pesticide and herbicide control information. The Discharger states that compared to other programs, such as control of household hazardous waste collection and used oil recycling administered by the Kern County Waste Management Department, the control of pesticides and herbicides has little impact on the drainage basins within the permit area.

21. Section 122.26(d)(2)(iv)(A)(6) of 40 CFR states that a program is to be included in a Discharger's SWMP "to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities." The program should target household and municipal sources. Therefore, the Discharger needs to revise the Control of Pesticides and Herbicides program and continue reporting on the status of the program in its annual report.
22. The State Water Resources Control Board issued NPDES General Permits for the discharge of storm water associated with industrial and construction activities (CAS000001 and CAS000002, respectively). To implement the industrial, new development, and construction elements of the SWMP effectively, the Discharger will, at the levels and frequencies described in the SWMP, conduct inspection activities at industries or construction sites to determine compliance with the NPDES General Permits. The City and County issue building permits, which implement storm water control provisions. Under the Clean Water Act, the Discharger cannot directly enforce the General Permits, but can and should enforce building permit conditions. The Board intends to work cooperatively with the Discharger to ensure compliance with the requirements of the General Permits.
23. Order No. 94-164 required the Discharger to submit a copy of a signed, formal City-County agreement that defines the roles and responsibilities of each relative to implementing the terms of this Order. Although the County and City have entered into a formal agreement by which they agree to share costs and responsibility for compliance with this Order, it expired on 24 June 1999 when Order No. 94-164 expired. Unless this agreement is renewed, the County and City must implement independent programs.
24. When a formal agreement is in place, the County of Kern assumes lead responsibility for day-to-day permit implementation, particularly submittal of annual reports, and liaison with the Board regarding permit matters.
25. Certain storm water facilities may create a habitat for vectors if not properly designed or maintained. Storm water facilities that generate vectors or nuisances can be eliminated or avoided by close coordination of design and surveillance and control with the local Mosquito or Vector Control Agency or the State Department of Health Services. Nothing in this permit is intended to preclude inspection, abatement, or treatment of nuisances by the vector control agency in accordance with the Health and Safety Code.
26. It is not the intent of the federal storm water regulations, or this permit, to regulate storm water discharges from agriculture, open space, and rural land development where they occur in the permit area (40 CFR 122.26(a)(v)).
27. The term "storm water," as used in this permit, includes storm water runoff, snowmelt runoff, and surface runoff and drainage from areas other than those land use types identified in Finding 26.

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28. The Bakersfield area, as measured at the Bakersfield Airport weather station, receives an average of 6.25 inches of precipitation per year, according to the Western Regional Climate Center website.
29. Attachments 1, 2, 3, and 4 are a part of this order.
30. The SWMP and SUSMPs represent best practicable treatment and control of the discharge. The impact on surface water quality and groundwater quality will be minimized through implementation of BMPs, and any consequent degradation considered in the best interest of the people of the state. The discharge will not unreasonably threaten present and anticipated beneficial uses or result in groundwater that exceeds or threatens to exceed water quality objectives set forth in the Basin Plan. Given these considerations, the discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16.
31. The action to adopt this NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), requiring preparation of an environmental impact report or negative declaration, in accordance with Section 13389 of the California Water Code.
32. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
33. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
34. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided EPA has no objections.

**IT IS HEREBY ORDERED** that Order No. 94-164 is rescinded and the County of Kern and the City of Bakersfield, their agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

**A. Discharge Prohibition:**

Discharge of non-storm water (material other than storm water), except as allowed by Provision D.6 or an individual NPDES permit, is prohibited.

**B. Discharge Specification:**

The Discharger shall reduce the discharge of pollutants into the storm drainage system to the maximum extent practicable.

**C. Receiving Water Limitations:**

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1. Discharges from the MS4 shall not cause or unreasonably contribute to the following in receiving water:
  - a. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on objects in the water.
  - b. Oils, greases, waxes, floating material (liquids, solids, foams, and scums), or suspended material to create a nuisance or adversely affect beneficial uses.
  - c. Aesthetically undesirable discoloration.
  - d. Fungi, slimes, or other objectionable growths.
  - e. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
  - f. Deposition of material that causes a nuisance or adversely affects beneficial uses.
  - g. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental physiological response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
  - h. Concentrations of dissolved oxygen to fall below 5.0 mg/l.
  - i. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal, or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that it presents a hazard to human, plant, animal, or aquatic life.
  - j. The normal ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 units.
  - k. Turbidity to exceed the following limits:
    - Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU.
    - Where natural turbidity is equal to or between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
    - Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.
  - l. Violations of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.
2. Discharges to structural controls, such as detention and retention basins, shall not cause underlying groundwater to exceed water quality objectives or adversely affect beneficial uses.

**D. Provisions:**

1. The Discharger shall comply with Prohibition A by implementing and enforcing institutional controls that effectively preclude discharge of non-storm water (except as noted in Provision D.6) through its system into waters of the United States.
2. The Discharger shall comply with Prohibition A by implementing and enforcing controls on spills, dumping, and disposal of materials other than storm water into the MS4, and by establishing and maintaining an effective emergency spill response program to respond to and contain spills that inadvertently occur.

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3. The Discharger shall comply with Discharge Specification B by continued implementation of the SWMP.
4. By **15 June 2002**, the Discharger shall submit a technical report comparing the existing SWMP with the general SUSMP described in Attachment 4. The comparison shall determine whether and how the existing program must be changed to be at least as protective of water quality as the general SUSMP. The report shall also include a plan and a time schedule to implement additional BMPs to achieve a comparable program. Upon approval by the Executive Officer, the plan shall be implemented in accordance with the approved time schedule.
5. The Discharger shall comply with Receiving Water Limitations C.1 and C.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP (including any modifications) and with the other requirements of this permit. The SWMP shall be designed to achieve compliance with Receiving Water Limitations C.1 and C.2. If exceedance(s) of the limitations occur that are attributable in whole or part to the discharge and persist or recur notwithstanding implementation of the SWMP and other requirements of this permit, the Discharger shall assure it has done everything reasonable and necessary to assure compliance with Receiving Water Limitations C.1 and C.2 by complying with the following procedure:
  - a. Upon a determination by the Discharger that discharges are causing or contributing to an exceedance of Receiving Water Limitations, the Discharger shall notify the Board of its findings within 30 days of the determination. Upon written notification from the Executive Officer, whether the determination is made by the Discharger or the Board, the Discharger shall submit for review and approval by the Executive Officer a report that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of Receiving Water Limitations. The report may be incorporated in the annual update to the SWMP unless the Executive Officer directs an earlier submittal. The report shall include an implementation schedule.
  - b. Within 30 days following approval of the report described above, the Discharger shall revise the SWMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required.
  - c. The Discharger shall implement the revised SWMP and monitoring program in accordance with the approved schedule.

So long as the Discharger has complied with the procedures set forth above and is implementing the revised SWMP, the Discharger is not required to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed in writing by the Board to develop additional BMPs.

6. Unless determined by the Executive Officer or the Discharger to be significant sources of pollutants, the following non-storm waters may be discharged through the storm water drainage system:

- a. water line flushing;
  - b. landscape irrigation;
  - c. diverted stream flows;
  - d. rising groundwaters;
  - e. uncontaminated groundwater infiltration (as defined in 40 CFR 35.2005(20));
  - f. uncontaminated pumped groundwater;
  - g. discharges from potable water sources;
  - h. foundation drainage;
  - i. air conditioning condensate;
  - j. irrigation water;
  - k. springs;
  - l. water from crawl space pumps;
  - m. footing drainage;
  - n. lawn watering;
  - o. individual residential car wash water;
  - p. flows from riparian habitats and wetlands;
  - q. dechlorinated swimming pool discharges;
  - r. waters from fire fighting activities that are free of contaminants or are otherwise necessary to avoid threats to public health and safety.
7. Major outfalls not identified in the SWMP, but constructed during the term of this Order to receiving waters identified herein, shall not be considered a material change in character, location, or volume of the permitted discharge, and shall be allowed under the terms of this Order without permit application or permit modification, provided at least 90 days prior to construction of the outfall the Discharger submits a report that includes:
- a. Receiving water name;
  - b. Storm water outfall location map;
  - c. Drainage area (in acres);
  - d. Land use designation; and
  - e. Certification that the SWMP shall be amended to include the drainage area.
8. The Discharger shall perform the actions set forth in the SWMP to achieve compliance with this Order, including, but not limited to:
- a. Performing inspection, surveillance, and monitoring procedures necessary to determine compliance with ordinances, permits, and other components of the SWMP;
  - b. Implementing programmatic functions as described in the SWMP;
  - c. Providing the requisite funding and personnel to implement the storm water program as described in the SWMP; and,
  - d. Enforcing codes, ordinances, and permits.
9. By **15 September 2001** the Discharger shall submit a copy of an active, signed, formal City-County agreement. Failure by the City and County to enter into a formal agreement by the above date shall terminate coverage of the permit for the City and County. Further discharges will be considered discharges without a permit in violation of California Water



Code (CWC) Section 13376 and subject the City and County to potential Civil Liability under CWC Section 13385 and to potential third-party lawsuits.

10. By **15 December 2001** the Discharger shall submit a template storm water inspection checklist. Following approval by the Executive Officer, the checklist shall be used by the City and County to assist in compliance with Provision 8.a.
11. By **15 December 2001** the Discharger shall submit a proposed training program. The training program shall cover storm water pollution prevention, detection, and abatement issues. Staff that carry out prevention, detection, investigation, monitoring, abatement, and enforcement activities proposed in the SWMP shall attend the course. Staff assigned such tasks shall be familiar with applicable elements of the SWMP. The Discharger shall, at its own discretion, develop supplemental lesson plans directed at staff with different responsibilities (e.g., planners, building inspectors, road and maintenance crews, and supervisors). Following approval by the Executive Officer, the training program shall be implemented.
12. By **15 December 2001**, the Discharger shall submit for approval by the Executive Officer, a plan to assess the treatment efficiencies of the basins.
13. By **15 February 2002** the Discharger shall submit for approval by the Executive Officer, a plan to further control illicit dumping (see Finding 11). Upon approval, the Discharger shall implement the plan.
14. By **15 February 2002** the Discharger shall submit a detailed drainage facilities maintenance plan. The plan should include schedules and/or criteria for maintaining catch basins, pipelines, ditches and open channels, detention basins, sumps/retention basins, street "siphons," and ancillary facilities (weirs, gates, trash racks, pumps, fencing, etc.).
15. By **15 September 2001** the Discharger shall submit a description of the procedures for incorporating storm water BMPs into the site planning process for new developments and public works projects that are part of the Discharger's Site Planning Procedures program of the SWMP. The description shall include information regarding what department(s) has authority to require BMPs, what BMPs are used, and in what cases BMPs are required.
16. By **15 June 2002** the Discharger shall submit for approval by the Executive Officer, a plan to develop a public outreach program targeting users of pesticides and fertilizers and addressing procedures for municipal application of pesticides and fertilizers (see Finding 21). The plan shall be implemented following approval by the Executive Officer.
17. By **15 June 2002** the Discharger shall submit to the Regional Board a plan to investigate the sources of the high zinc concentrations found in the industrial area's runoff (see Finding 17). Upon approval of the Executive Officer, the plan shall be implemented.
18. By **15 January 2003** the Discharger shall submit a report on the possible constituent accumulation in and migration from storm water basins. The report shall discuss pollutants of concern and a plan to monitor and detect those constituents. Existing studies and water

quality data may be incorporated. The report shall demonstrate the applicability of any referenced studies or data.

19. By **15 June 2002** the Discharger shall submit a report evaluating the Monitoring Program for Industrial Activities program of their SWMP. Specifically, the report should address the scope of the program as compared to the range of industrial facilities subject to the NPDES General Permit, the effectiveness of the program in achieving program goals, and propose changes to the program that may make it more effective.
20. The Discharger shall maintain the legal authority required by 40 CFR 122.26(d)(2)(i). Legal authority will be such that a general storm water permittees' (industrial and construction) compliance with local ordinances will also assure compliance with the State NPDES general permits.
21. The Discharger shall require that business, industrial, and construction activities comply with all local requirements and conditions, including local prohibitions. The Discharger shall conduct adequate compliance and enforcement activities to ensure that business, industrial, and construction activities comply with the County or City storm water ordinances. An element of the Discharger's enforcement plan may include requesting assistance from the Board to pursue a noncomplying industrial facility, once the Discharger has exhausted enforcement remedies provided in its legal authority.
22. The Discharger shall perform the activities in the SWMP, and use its enforcement authorities to ensure compliance with the construction and industrial NPDES permits for discharges. For cases of noncompliance in which the Discharger lacks sufficient means or authority to ensure compliance, the Discharger shall refer the case to the Board in writing for further enforcement.
23. The Discharger shall inspect for dry weather flows at each of the storm water outfalls shown in Attachment 3 at least once per year. Should such flows be found to contain pollutants, the Discharger will investigate the source of the discharge, and, if appropriate, proceed with abatement activities as described in the SWMP. Documentation of inspections performed during the year and consequent source investigations shall be included in the annual report. This requirement shall also apply to new outfalls not included in Attachment 3 but reported to the Board pursuant to Provision D.7.
24. The Discharger shall consider vector and nuisance abatement while implementing all parts of the revised SWMP. The Discharger shall consult with the Local Mosquito or Vector Control Agency or the State Department of Health Services and implement reasonable and appropriate BMPs to minimize mosquito or vector breeding.
25. The SWMP may need to be revised or amended to respond to changed conditions and to incorporate more effective approaches to pollutant control. Requests for changes may be initiated in writing by either the Executive Officer or by the Discharger. In response to the Discharger's request, the Executive Officer may approve the request in writing or request a report if more information is necessary, before submittal to the Board. Minor changes may be approved by the Executive Officer and reported to the Board as an information item. Major changes are subject to Board approval.

26. The SWMP, and any modifications or revisions to the SWMP that are approved in accordance with Provision D.25 of this Order, are enforceable components of this Order. The timely implementation of BMPs and other actions to reduce pollutants in storm water discharges in accordance with the SWMP and any of its modifications, revisions, or amendments thereto shall serve to demonstrate compliance with federal requirements to reduce pollutants to the Maximum Extent Practicable and this Order.
27. This Order may be modified, or alternatively, revoked or reissued, prior to the expiration date as follows: a) to address significant changed conditions identified in the technical reports required by the Board which were unknown at the time of the issuance of this Order; b) to incorporate applicable requirements of statewide water quality control plans adopted by the State Board or amendments to the Basin Plan approved by the State Water Resources Control Board; or c) to comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order. The Order as modified or reissued under this paragraph shall also contain any other requirement of the CWA when applicable.
28. The Discharger shall comply with Monitoring and Reporting Program No. 5-01-130, which is a part of this Order, and any revisions or modifications thereto as ordered by the Executive Officer.
29. The Discharger shall comply with all applicable Standard Provisions of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)," dated 1 March 1991, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
30. A copy of this Order and SWMP shall be kept at the appropriate offices of the agencies responsible for implementing the SWMP. Personnel responsible for supervising compliance with this Order and implementing the SWMP shall be provided copies and be familiar with the contents of each.
31. The Discharger may request changes to the Monitoring and Reporting Program. Revisions to the Monitoring and Reporting Program shall be subject to approval of the Executive Officer. Approved changes will not be less in scope and frequency than provided for in this Order.
32. This Order expires on **14 June 2006**. The Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than 180 days in advance of the expiration date, and an application for renewal of the NPDES Storm Water Permit.

I, GARY M. CARLTON, Executive Officer, do hereby certify 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 14 June 2001.

Original signed by

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GARY M. CARLTON, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 5-01-130

NPDES NO. CA00883399

FOR  
COUNTY OF KERN  
AND  
CITY OF BAKERSFIELD  
FOR  
URBAN STORM WATER DISCHARGES  
KERN COUNTY

**STORM WATER MONITORING**

Sampling and analytical procedures shall be in accordance with the United States Environmental Protection Agency's recommended procedures. Chain of custody forms shall be completed for each sample collected and copies provided to the Regional Board. Wet weather samples shall be collected and analyzed from the following three locations (as identified in the proposed monitoring plan in Part 2 of the Discharger's original permit application):

1. Mohawk Drive detention basin outfall;
2. North Chester Avenue manhole access north of the Golden State Overpass; and
3. Hawthorne Ravine at the intersection of Hawthorne Avenue and River Boulevard.

Samples shall be collected at least twice per year during the first three hours of runoff from a storm event of at least 0.1 inches precipitation. Inasmuch as possible, the Discharger shall collect samples early in the rain season during "first flush" conditions. Collected storm water samples shall be analyzed for the following constituents:

<u>Constituent</u>	<u>Units</u>	<u>Type</u>
BOD <sub>5</sub>	mg/L	Composite
COD	mg/L	Composite
TOC	mg/L	Composite
TDS	mg/L	Composite
TSS	mg/L	Composite
Total Hardness	mg/L	Composite
Total Phosphorous	mg/L	Composite
Dissolved Phosphorous	mg/L	Composite

Total Kjeldahl Nitrogen	mg/L	Composite
Nitrate	mg/L	Composite
Ammonia-Nitrogen	mg/L	Composite
Arsenic	µg/L	Composite
Cadmium	µg/L	Composite
<u>Constituent</u>	<u>Units</u>	<u>Type</u>
Chromium	µg/L	Composite
Copper	µg/L	Composite
Lead	µg/L	Composite
Mercury	µg/L	Composite
Nickel	µg/L	Composite
Selenium	µg/L	Composite
Zinc	µg/L	Composite
Oil and Grease	mg/L	Grab
EC	µmhos/cm	Grab
pH	pH units	Grab
Total Coliform	MPN/100 mL	Grab
Fecal Coliform	MPN/100 mL	Grab
Fecal Streptococci	MPN/100 mL	Grab

The Discharger shall include the date and duration (in hours) of the storm event(s) sampled, rainfall measurements, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event. The data shall be arranged in tabular form so that the date, the constituents, and the concentrations are readily discernible. Data collected from storm water sampling shall be used to estimate the seasonal pollutant load generated within the respective drainage areas using the same methodology as used in the 1992-93 monitoring assessment submitted in the Part 2 Application. The monitoring data and pollutant load estimate shall be included in the annual report.

### **DRY WEATHER MONITORING**

The discharger shall inspect for dry weather flows as described in Provision 23. Flows that appear to be contaminated shall be analyzed for the above listed constituents along with any other constituents that appear likely to be present. A minimum of two locations shall be sampled.

### **RECEIVING WATER MONITORING**

Receiving water shall be monitored upstream and downstream of the discharge locations during two rain events and once during dry weather. The receiving water monitoring events shall coincide with the storm water monitoring.

Upstream receiving water samples shall be taken at Rocky Point Weir. The downstream receiving water samples shall be collected from the Calloway Headgate. By **14 August 2001**, the Discharger shall submit a description of the specific sampling location. The sampling location must allow for samples to be taken which are representative of the flows in the River.

Receiving water shall be analyzed for the following constituents:

<u>Constituent</u>	<u>Units</u>	<u>Type</u>
BOD <sub>5</sub>	mg/L	Composite
COD	mg/L	Composite
TOC	mg/L	Composite
TDS	mg/L	Composite
TSS	mg/L	Composite
Total Hardness	mg/L	Composite
Total Phosphorous	mg/L	Composite
Ortho-Phosphate	mg/L	Composite
Total Kjeldahl Nitrogen	mg/L	Composite
Nitrate	mg/L	Composite
Ammonia-Nitrogen	mg/L	Composite
Arsenic	µg/L	Composite
Cadmium	µg/L	Composite
Chromium	µg/L	Composite
Copper	µg/L	Composite
Lead	µg/L	Composite
Mercury	µg/L	Composite
Nickel	µg/L	Composite
Selenium	µg/L	Composite
Zinc	µg/L	Composite
Organochlorine Pesticides	µg/L	Composite
Organophosphate Pesticides	µg/L	Composite
Purgeable Aromatic Constituents	µg/L	Composite
Herbicides	µg/L	Composite
Oil and Grease	mg/L	Grab
EC	µmhos/cm	Grab
pH	pH units	Grab
Total Coliform	MPN/100 mL	Grab
Fecal Coliform	MPN/100 mL	Grab
Fecal Streptococci	MPN/100 mL	Grab

### REPORTING

The Discharger shall submit, by **1 September each year**, an annual report, covering the previous year between 1 July and 30 June, which includes:

1. A discussion of program accomplishments;

2. Results of the Illicit Discharge Elimination Program, including
  - a. Number, quantity, and quality of identified dry weather flows, and
  - b. Number, quantity, quality, and source of identified illicit discharges existing and eliminated;
3. Known spill incidents that resulted in a discharge to the storm sewer or water of the United States, including the type, quantity, quality, and source of spill;
4. Monitoring information collected pursuant to the Storm Water Monitoring program, including
  - a. Results of all sampling,
  - b. Estimation of pollutant loads generated within the drainage area, and
  - c. Percent change in pollutant load from the previous permit years;
5. A summary of industrial and construction activity storm water inspections conducted, including
  - a. Number of inspections conducted,
  - b. Follow-up activities,
  - c. Results of follow-up activities and enforcement, and
  - d. Proposed improvements to the program;
6. The names, titles, and phone numbers of personnel responsible for supervising implementation of the SWMP for each Permittee;
7. A discussion of the effectiveness of pollution control activities described in the SWMP, including information gathered to qualitatively and quantitatively evaluate the ability of the SWMP to reduce pollutants;
8. A discussion of the adequacy of legal authority and/or legal controls for implementing and carrying out the SWMP; and
9. Recommended changes and/or modifications to the SWMP.

In its annual report, the Discharger shall demonstrate whether the discharge of pollutants to receiving waters has been reduced to the maximum extent practicable, and whether it is in substantial compliance with the SWMP.

All reports submitted in response to this Order shall comply with the signatory requirements stipulated in Standard Provision D.6.

The Discharger shall implement this program on the first day of the month following the effective date of this Order.

Ordered by: \_\_\_\_\_  
GARY M. CARLTON, Executive Officer

\_\_\_\_\_  
14 June 2001

## INFORMATION SHEET

PROPOSED ORDER NO. 5-01-130  
COUNTY OF KERN AND CITY OF BAKERSFIELD  
URBAN STORM WATER DISCHARGES  
FRESNO COUNTY

The discharge of water (both storm water and non-storm water) through the Municipal Separate Storm Sewer System (MS4) by the City of Bakersfield and the surrounding metropolitan area in the County of Kern is regulated by Order No. 94-164, which has been administratively extended beyond its expiration date. The County of Kern and the City of Bakersfield (hereafter referred to collectively as 'Discharger' and individually as 'Permittees') are named on this proposed permit. The agencies each have authority over about half the land use in the urbanized area and control the MS4 within those areas.

Order 94-164 only covered drainage areas within the Metropolitan Area that discharged to waters of the U.S. This proposed permit redefines the permit area to include the whole Metropolitan Area.

The Discharger submitted its reapplication package on 29 December 1998. The package outlined the Discharger's Storm Water Management Plan (SWMP). The SWMP describes the Best Management Practices (BMPs) that will be implemented in the permit area to prevent the discharge of pollutants in storm water. It also identifies Permittee implementation and financial responsibilities. It is proposed that much of the program will remain the same as during the first permit term but proposes two changes. The Discharger requested changing the downstream receiving water monitoring location and removing the pesticide and herbicide control program of its SWMP. Due to the diversions of the Kern River as part of the region's complex water distribution system, the original downstream receiving water monitoring station often lacks adequate flow for sampling. Consequently, this proposed permit supports the downstream monitoring location change from the Truxtun Extension at Coffee Road location to the Calloway Headgate. However, this proposed permit does not support elimination of the pesticide and herbicide program and consequently requires a revised pesticide and herbicide control plan.

Several of the MS4 permits for areas around the state that are on their second term contain or have given consideration to Standard Urban Storm Water Mitigation Plans (SUSMPs) for specific categories of developments. In general, the SUSMP requires that 85 percent of the runoff from the subject sites be infiltrated or treated and require or recommend specific BMPs. The State Board has found that the provisions in the SUSMPs constitute MEP. This proposed permit requires a comparison of the Discharger's current SWMP to requirements of a general SUSMP. If the SWMP is not at least as protective, revisions of the SWMP are required to make it so.

Although this proposed permit does not set numeric effluent limits for storm water discharges, it does require compliance with water quality limitations that protect the beneficial uses of receiving waters, as outlined in the *Water Quality Control Plan for the Tulare Lake Basin* (Basin Plan).



ORDER NO. 5-01-130

The objectives of receiving water monitoring are to assure that beneficial uses are protected and to gather data in order to evaluate the water quality impacts of implementing an MS4 program. Evaluating water quality impacts is seen as a long-term objective and will require several more years of monitoring data. Detention basins treat approximately 40% of the runoff that is discharged to receiving waters from the permit area before being discharged to receiving waters. Currently, the only receiving water tested is the Kern River, though

storm water is also sampled before it reaches receiving waters.. Approximately 65% of storm water runoff discharged to receiving water is discharged to the Kern River, 20% to the East Side Canal, 10% to the Kern Island Canal, 5% to the Carrier Canal, and less than 1% to the Stine Canal.

Detention basins are used within the permit area to contain water before possibly discharging it to surface water. In general, the use of detention basins is an accepted treatment of storm water, however, detention basins within the area do not have design specifications nor have treatment efficiencies been assessed. This proposed permit requires a plan to assess treatment efficiencies of detention basins within the area. The plan may propose such things as establishing an inlet and an outlet sampling point at a basin expected to provide the worst treatment efficiency or at a basin of an especially large drainage area.

The Discharger has reported for several years that large amounts of non-vegetative debris are removed from the MS4. Such quantities suggest that the Discharger can improve its illegal dumping control program. Additionally, the Discharger receives 2,646 complaint calls regarding illegal dumping. This proposed permit requires a plan to further control illicit dumping.

The National Urban Runoff Program (NURP) Study, conducted in the early eighties, found that the average zinc concentration in runoff from industrial areas was 226 µg/l. Between 1993 and 1999, the Discharger reported zinc concentrations from the North Chester sampling location (representing industrial areas) ranging from 270-1200 µg/l with an average of 608 µg/l. Because the concentrations are higher than typical, this proposed permit requires the Discharger to submit a plan to investigate the sources of zinc and implement the plan once it has been approved.

The Discharger reports maintenance activities each year in its annual reports and includes maintenance as a BMP. However, no performance standards are included in the BMP and field investigations show that additional maintenance is needed. This proposed permit requires a detailed maintenance plan to provide measurable goals and to provide a tool to evaluate appropriate activity levels.

Through implementation of the SWMP, the impact on surface and groundwater will be minimized and any consequent degradation considered in the best interest of the people of the state. Therefore, the discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16.

The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), requiring preparation of an environmental impact report or negative declaration, in accordance with Section 13389 of the California Water Code.

JAB:fmc:6/14/01