

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2005-0149

NPDES NO. CA0081256

WASTE DISCHARGE REQUIREMENTS
FOR
KRAFT FOODS, INC.
VISALIA PLANT
TULARE COUNTY

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

1. Kraft Foods, Inc., a California corporation, owns and operates a milk products processing plant at 715 North Divisadero Street in Visalia, California, as shown on Attachment A, a part of this Order. Kraft Foods, Inc., is hereafter referred to as Discharger.
2. This Order regulates the discharge of non-contact cooling water to Mill Creek, a water of the United States. The discharge was previously governed by Waste Discharge Requirements Order No. 97-122, (National Pollutant Discharge Elimination System (NPDES) Permit No. CA0081256) adopted by the Regional Board on 20 June 1997. The Discharger submitted a Report of Waste Discharge (RWD), dated 17 December 2001, and applied for permit renewal.
3. The Discharger's effluent consists of non-contact cooling water from the initial cooling cycle for three cottage cheese process starter tanks and from evaporation pump seals. The source water is groundwater pumped from an on-site well, which is chlorinated to inhibit biological activity in the cooling system. The non-contact cooling water is discharged from the plant to a storm drain, which discharges to Mill Creek via Discharge 001, as shown on Attachment A. The non-contact cooling water is not treated prior to discharge.
4. The Discharger's RWD describes the discharge as follows:

Maximum Daily Flow Rate: 25,000 gallons per day

5. Based on data from monthly self-monitoring and laboratory reports submitted by the Discharger between December 2000 and November 2003, the characteristics of the discharge are as follows:

<u>Constituent</u>	<u>Units</u>	<u>Min</u>	<u>Max</u>	<u>Average</u>
Flow	Million gallons per day (mgd)	--	--	0.02 ¹
Conductivity @ 25° C	µmhos/cm	4	270	155
pH	Standard units	6.2	9.64	--

<u>Constituent</u>	<u>Units</u>	<u>Min</u>	<u>Max</u>	<u>Average</u>
Chlorine Residual	mg/L	0	1	0.21
Temperature	°C	16.2	44.6	26.2

¹ The Discharger reported the same flow of 0.02 mgd in each report submitted.

RECEIVING WATER BENEFICIAL USES

6. The discharge to Mill Creek occurs at a point in the SE¼ of Section 30, T18S, R25E, MDB&M (Discharge 001). Mill Creek is an ephemeral stream tributary to Cross Creek approximately 10 miles downstream of the discharge. During wet years, Cross Creek discharges to the Tule River, approximately 15 miles downstream of the confluence of Mill Creek with Cross Creek. The site lies within the Kaweah Delta Hydrologic Area (558.10) in the South Valley Floor Hydrologic Unit.
7. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve WQOs for all waters of the basin. These requirements implement the Basin Plan.
8. The Basin Plan designates the beneficial uses of Valley Floor Waters, such as Mill Creek and Cross Creek as:
 - 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 (including spawning) (WARM);
 - wildlife habitat (WILD);
 - support of rare, threatened, or endangered species (RARE); and
 - groundwater recharge (GWR).
9. The ephemeral nature of Mill Creek means that no consistent receiving water dilution is available to buffer pollutants and help protect the designated beneficial uses. The lack of dilution results in more stringent limitations for attainment of narrative criteria to protect agricultural beneficial uses and aquatic life.
10. Based on information from the “Lines of Equal Elevation of Water Wells in Unconfined Aquifer,” published by the Department of Water Resources in Spring 1995, the depth of groundwater in the region is about 95 feet below ground surface. The beneficial uses of the underlying groundwater are MUN, AGR, IND, PRO, REC-1, and REC-2.

EFFLUENT LIMITATIONS AND REASONABLE POTENTIAL ANALYSES

11. The U.S. Environmental Protection Agency (USEPA) adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge. On 2 March 2000, the SWRCB adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP), which contains guidance on implementation of the NTR and CTR.
12. The federal Clean Water Act (CWA) mandates the implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to state or federal law (33 U.S.C., § 1311(b)(1)(C); 40 CFR 122.44(d)(1)). NPDES permits must incorporate discharge limitations necessary to ensure that water quality standards are met. This requirement applies to narrative criteria as well as to criteria specifying maximum amounts of particular pollutants. Pursuant to federal regulations, 40 CFR 122.44(d)(1)(i), NPDES permits must contain limitations that control all pollutants that “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality.” Federal regulations, 40 CFR 122.44(d)(1)(vi), further provide that “[w]here a state has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits.”
13. Section 1.3 of the SIP requires this Regional Board to impose water quality-based effluent limitations for a priority pollutant if (a) the maximum effluent concentration (MEC) is greater than the most stringent CTR or NTR criterion or applicable site-specific Basin Plan objective, or (b) the ambient background concentration is greater than the CTR or NTR criterion or applicable site-specific Basin Plan objective and the pollutant is detected in the effluent, or (c) other information is available to determine that a water quality-based effluent limitation is necessary to protect beneficial uses.
14. The Basin Plan contains narrative objectives requiring that: “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life” and “Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.” The Basin Plan requires the application of the most stringent objective necessary to ensure that surface water and groundwater do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances that adversely affect beneficial uses. As described above, when a reasonable potential exists for exceeding a narrative objective, federal regulations mandate numeric effluent limitations and the Basin Plan establishes a procedure for translating the narrative objectives into numeric effluent limitations.
15. The Discharger was issued a letter on 27 February 2001, pursuant to California Water Code (CWC) Section 13267, requiring effluent and receiving water monitoring meeting the

requirements of the SIP. These data were required to assist the Regional Board in conducting reasonable potential analyses (RPAs).

16. The Discharger submitted effluent monitoring data on 19 June 2003 for a single monitoring event, which partially fulfills the monitoring required in the 27 February 2001 letter. The data did not include analytical results for sixteen of the seventeen 2,3,7,8-TCDD congeners identified in the SIP. Additional data is needed to conduct a complete RPA for CTR constituents.
17. To gather the information necessary to conduct a RPA for CTR constituents, it is appropriate to require the Discharger to:
 - a. Provide additional information regarding the levels of NTR and CTR constituents in the discharge.
 - b. Conduct a RPA for detected constituents, and
 - c. Calculate effluent limitations for constituents showing reasonable potential to cause or contribute to an in-stream excursion above a water quality standard, including Basin Plan numeric and narrative objectives and NTR and CTR criteria.

The Regional Board may then need to reopen this Order and include effluent limitations for constituents showing reasonable potential.

18. Based on information submitted as part of the application and as directed by monitoring and reporting programs, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard for the non-CTR constituents total residual chlorine and pH.

EFFLUENT LIMITATIONS FOR NON-CTR CONSTITUENTS

19. **Flow and pH:** Effluent limitations for flow and pH were included in the previous Order. The flow limitation from the previous Order is being carried over to this Order, which is based on the maximum daily flow rate listed in the Discharger's RWD. The pH limitation has been revised from the previous Order and is based on the Basin Plan, which requires that the pH of receiving waters not be depressed below 6.5, or raised above 8.3 standard units, or changed at any time more than 0.3 units from normal ambient pH. The pH effluent limitation is based on application of this water quality objective at the point of discharge.
20. **Total Residual Chlorine:** Based on data from monthly self-monitoring and laboratory reports submitted by the Discharger between December 2000 and November 2003, the chlorine concentration in the effluent averaged 0.21 mg/l (210 µg/l). The USEPA has established a National Recommended Ambient Water Quality Criteria for Freshwater Aquatic Life Protection for chlorine of 19 µg/l as a 1-hour average (acute) concentration, and 11 µg/l as a 4-day average (chronic) concentration. Based on this information, the Regional Board has determined that the discharge of chlorine in the plant's effluent has the reasonable potential to cause or contribute to an excursion of the narrative toxicity objective from the Basin Plan.

Effluent limitations for total residual chlorine calculated as 0.01 mg/L as a monthly average and 0.02 mg/L as a daily maximum using procedures in USEPA's *Technical Support Document for Water Quality-based Toxics Control* (1991) are appropriate to protect the designated beneficial uses of WARM in Mill Creek. Based on the monitoring data available, it appears the Discharger cannot consistently comply with the established limitations, and a compliance time schedule is needed. However, as the Basin Plan narrative toxicity objective is not a new objective, a schedule of compliance for chlorine is not included in this Order. A separate Time Schedule Order shall be proposed for compliance with the chlorine effluent limitations.

RECEIVING WATER LIMITATIONS

21. Receiving water limitations in this Order are based on the water quality objectives in the Basin Plan and are established to protect the designated beneficial uses for the receiving waters.

GROUNDWATER LIMITATIONS

22. The Basin Plan requires the application of the most stringent objective necessary to ensure that groundwaters do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances in concentrations that adversely affect designated beneficial uses. In addition, Resolution 68-16 requires the Regional Board, in regulating discharge of waste, to maintain high quality waters of the State. This permit does not allow the discharge to cause underlying groundwater to contain waste constituents in concentrations greater than natural background quality.

GENERAL FINDINGS

23. CWC Section 13267 states, in part:

(a) A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region. (b) (1) In conducting an investigation specified in [Section 13267] subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

24. CWC Section 13383 states:

(a) The state board or a regional board may establish monitoring, inspection, entry, reporting, and recordkeeping requirements, as authorized by Section 13377 or by subdivisions (b) and (c) of this section, for any person who discharges pollutants...

(b) The state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.

(c) The state board or a regional board may inspect the facilities of any person subject to this section pursuant to the procedure set forth in subdivision (c) of Section 13267.

25. Federal regulations at 40 CFR 122.48 require all NPDES permits to specify:

(b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring.

(c) Applicable reporting requirements based upon the impact of the regulated activity as specified in §122.44...

26. Monitoring and Reporting Program No. R5-2005-0149 is necessary to determine compliance with this Order. The Discharger operates the facility that discharges waste subject to this Order.

27. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge, maintain high quality waters of the State, not unreasonably affect beneficial uses, and not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives). Providing best practicable treatment for this industrial discharge will protect water quality from being degraded when compared to background water quality. The impact on existing water quality will be insignificant.

28. 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 §21000, et seq.), in accordance with Section 13389 of the California Water Code.

29. Stormwater runoff from the facility is stormwater associated with industrial activity as defined in 40 CFR 122.26. In compliance with Part 122, the Discharger submitted a Notice of Intent to comply with, and is now regulated by, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (General Permit No. CAS000001).

30. The USEPA and the Regional Board have classified this discharge as a minor discharge.

31. The Discharger and interested agencies and persons were notified of the intent to prescribe waste discharge requirements for this discharge and have been provided with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

32. All the above and the supplemental information and details in the Information Sheet and Attachments A and B were considered in establishing the conditions of this Order. The Information Sheet, Monitoring and Reporting Program No. R5-2005-0149 and Attachments A

and B are a part of this Order.

- 33. All comments pertaining to the discharge were heard and considered in a public meeting.
- 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 USEPA has no objections.

IT IS HEREBY ORDERED, pursuant to CWC Sections 13263, 13267, 13377, and 13383, that Order No. 97-122 is hereby rescinded and Kraft Foods, Inc., its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (National Pollutant Discharge Elimination System)" dated February 2004.]

A. Discharge Prohibitions:

Discharge of wastewater at a location or in a manner different from that described in this Order is prohibited.

B. Effluent Limitations (Discharge 001):

- 1. Effluent discharged from Discharge 001 shall not exceed the following limitations:

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly Limitation</u>	<u>Maximum Daily Limitation</u>
Flow	mgd	---	0.025
Total Residual Chlorine	mg/L	0.01	0.02

- 2. The discharge shall not have a pH less than 6.5 standard units nor greater than 8.3 standard units at any time.
- 3. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

Minimum for any one bioassay ----- 70%
Median for any three or more consecutive bioassays ---- 90%

C. Receiving Water Limitations

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in the receiving water:

1. Un-ionized ammonia to be present in amounts that adversely affect beneficial uses or that exceed 0.025 mg/L (as N).
2. The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 MPN/100 ml or cause more than 10 percent of the total number of samples taken during any 30-day period to exceed 400 MPN/100 ml.
3. Biostimulatory substances to be present in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
4. Discoloration that causes nuisance or adversely affects beneficial uses.
5. Chemical constituents in concentrations that adversely affect beneficial uses.
6. Concentrations of dissolved oxygen to fall below 5.0 mg/l. The monthly median dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation.
7. Floating material, including but not limited to solids, liquids, foams, and scum, in concentrations that create a nuisance or adversely affect beneficial uses.
8. Oils, greases, waxes, or other materials 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.
9. The ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 standard units from normal ambient pH.
10. Pesticides to be present in concentrations that adversely affect beneficial uses or cause an increase in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses.
11. Radionuclides to be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor which result in accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
12. Suspended sediment load and suspended sediment discharge rate to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
13. Substances in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
14. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

15. Taste or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin.
16. The ambient temperature to increase more than 5°F.
17. Toxic substances to be present in concentrations that produce detrimental physiologic responses in human, plant, animal, or aquatic life.
18. The turbidity to increase as follows:
 - a. More than 1 Nephelometric Turbidity Units (NTUs) 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 NTUs where natural turbidity is between 50 and 100 NTUs.
 - d. More than 10 percent where natural turbidity is greater than 100 NTU.
19. Violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board pursuant to the Clean Water Act and regulations adopted thereunder.

D. Groundwater Limitations

The discharge shall not cause underlying groundwater to contain waste constituents in concentrations greater than natural background quality.

E. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program No. R5-2005-0149, which is part of this Order, and any revisions thereto as ordered by the Executive Officer (EO).

When requested by USEPA, the Discharger shall complete and submit Discharge Monitoring Reports. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self Monitoring Reports.

2. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)", dated February 2004, which are part of this Order.

3. The Discharger shall keep a copy of this Order, including its attachments and Standard Provisions, at the facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
4. **Priority Pollutant Evaluation.** The Discharger shall provide a technical report describing the methods it will use to: provide the priority pollutant and dioxin monitoring required by the CWC Section 13267 order dated 27 February 2001 described in Finding No. 15; conduct an RPA consistent with the methodology in the SIP for all detected pollutants; and calculate proposed effluent limits for all constituents showing the reasonable potential to cause or contribute to an exceedance of a water quality objective in Mill Creek. The technical report shall include a work plan and implementation schedule. The work plan and implementation schedule are subject to EO approval. Provision E.7 requirements apply to this technical report. The following compliance schedule applies:

<u>Task</u>	<u>Compliance Date</u>
a. Submit the technical report including a work plan and implementation schedule to complete the Priority Pollutant Evaluation described above.	5 December 2005
b. Begin to implement approved work plan	<u>30 days following EO written approval of task 4.a.</u>
c. Submit written status report.	<u>7 months following completion of task 4.b.</u>
d. Complete implementation of approved work plan and submit in a written technical report proposed effluent limits for CTR constituents.	21 December 2006

This schedule does not supersede the schedule in the CWC Section 13267 Order dated 27 February 2001. The due dates in said Order may be used for the purpose of calculating potential administrative civil liability should assessment become necessary.

5. **Flow Monitoring.** The Discharger shall submit a technical report describing provisions for installing a totalizing flow measurement device to monitor the discharge to Mill Creek. Flow measurement is needed to verify compliance with Effluent Limitations B.1. The following compliance schedule applies:

<u>Task</u>	<u>Compliance Date</u>
a. Submit the technical report including a work	20 December 2005

<u>Task</u>	<u>Compliance Date</u>
plan and time schedule for installing a totalizing flow measurement device to monitor the discharge to Mill Creek.	
b. Begin to implement approved work plan.	<u>30 days following EO written approval of task 5.a.</u>
c. Submit written status report.	<u>3 months following completion of task 5.b.</u>
d. Complete installation and testing of necessary equipment and accessories; begin continuous effluent flow measurement.	21 September 2006
e. Submit certification of completion.	23 October 2006
6. The Discharger shall conduct the chronic toxicity testing specified in the Monitoring and Reporting Program. If the testing indicates that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the water quality objective for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger shall submit a workplan to conduct a Toxicity Reduction Evaluation (TRE) and, after Regional Board evaluation, conduct the TRE. This Order will be reopened and a chronic toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be reopened and a limitation based on that objective included.	
7. 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.	

8. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the EO requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Regional Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the CWC. Transfer shall be approved or disapproved in writing by the EO.

9. The Regional Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:
 - a. If present or future investigations demonstrate that the discharge governed by this Order has a reasonable potential to cause or contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters;
 - b. New or revised WQOs come into effect for the receiving water. In such cases, effluent limitations in this permit will be modified as necessary to reflect updated WQOs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs or as otherwise permitted under federal regulations governing NPDES permit modifications;
 - c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified. The Discharger may request permit modification on this basis. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.
10. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Regional Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of this Order.
11. The Discharger shall use best practicable control techniques currently available to comply with terms of this Order.

12. Prior to making any change in the discharge point, place of use, or purpose of use of the wastewater, the Discharger shall obtain approval of or clearance from the State Water Resources Control Board (Division of Water Rights).
13. This Order expires on **21 October 2010**, and the Discharger must file a RWD in accordance with Title 23, CCR, at least 180 days prior to the expiration date of this Order (i.e., by 23 April 2010) to apply for waste discharge requirements if it wishes to continue the discharge.

I, THOMAS R. PINKOS, 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 21 October 2005.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

MSS:fmc: 10/21/05

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD{PRIVATE }
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2005-0149

NPDES NO. CA0081256

FOR

KRAFT FOODS, INC.
VISALIA PLANT
TULARE COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to CWC Sections 13383 and 13267. The Discharger shall not deviate from this Program unless and until the Regional Board or Executive Officer issues a revised MRP. Any proposed changes to sampling locations must have the prior written concurrence of the Regional Board staff. After concurrence, a description of the change and Regional Board staff's written concurrence must be attached to the Discharger's copy of this Order.

Sample collection, storage, and analyses shall be performed according to 40 CFR Part 136 or other methods approved and specified by the Executive Officer of the Regional Board. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with the Standard Provisions, Provisions for Monitoring.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the California Department of Health Services (DHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DHS. The director of the laboratory whose name appears on the certification or his or her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work, including appropriate quality assurance/quality control procedures in his or her laboratory, and shall sign all reports of such work submitted to the Regional Board.

EFFLUENT MONITORING

Effluent samples shall be collected downstream from the last connection through which wastes can be admitted into Discharge 001 and prior to discharge to Mill Creek. Effluent samples shall be representative of the volume and quality of the discharge.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed below, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

Effluent monitoring (Discharge 001) shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Meter ¹	Continuous ¹
Total Residual Chlorine	mg/L	Meter ⁴	Continuous ⁴
pH	standard units	Grab	Monthly
Temperature	°F	Grab	Monthly
Conductivity @ 25°C	µmhos/cm	Grab	Monthly
Standard Minerals ²	mg/L	Grab	Annually
Priority Pollutants ³	µg/L	Grab	Twice during permit term ⁶
Acute Toxicity ⁵	% Survival	Grab	Once during permit term

¹ Flow is to be estimated until the effective date specified in Provision E.5, after which flow shall be measured continuously.

² Standard minerals shall include all major cations and anions and include verification that the analysis is complete (i.e., cation/anion balance).

³ Conducted in accordance with “Priority Pollutant Monitoring” requirements below.

⁴ Grab samples are to be collected weekly until the effective date specified in the accompanying Time Schedule Order, after which chlorine shall be monitored continuously.

⁵ The acute bioassays samples shall be analyzed using methods in EPA/600/4-90/027F, Fourth Edition, or later amendment with Board staff approval. Temperature and pH shall be recorded at the time of bioassay sample collection. Test species shall be fathead minnows (*Pimephales promelas*).

⁶ Both sampling events shall occur between 21 October 2009 and 23 April 2010.

PRIORITY POLLUTANT MONITORING

The *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP) states that the Regional Boards will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. Accordingly, in addition to the priority pollutant monitoring required in the Provisions of this Order, the Discharger shall conduct effluent monitoring (at Discharge 001) and receiving water monitoring (at R-1) of priority pollutants **two times between 21 October 2009 and 23 April 2010**. The list of priority pollutants and required minimum levels (MLs) is included as Attachment B. The Discharger must analyze pH and hardness at the same time as priority pollutants.

The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the USEPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical

determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.
- b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
- c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or – a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- d. Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

THREE SPECIES CHRONIC TOXICITY MONITORING

The Discharger shall conduct chronic toxicity monitoring to determine whether the effluent is contributing toxicity to the receiving stream. Since the receiving stream is ephemeral, chronic toxicity testing shall be conducted on whole effluent. Testing must be conducted as specified in the latest edition of *EPA 821-R-02-013 Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms*. Chronic toxicity samples of the final effluent shall be collected at Discharge 001. Twenty-four hour composite samples shall be representative of the volume and quality of the discharge. Time of sample collection shall be recorded. The effluent tests must be conducted with concurrent reference toxicant tests. Monthly laboratory reference toxicant tests may be substituted upon approval. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the chronic test manual. If the test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. Chronic toxicity monitoring shall include the following:

Species: *Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum*

Frequency: Annually in April

Dilution Series:

	<u>Dilutions (%)</u>					<u>Controls</u>	
	<u>100</u>	<u>75</u>	<u>50</u>	<u>25</u>	<u>12.5</u>	<u>Creek Water</u>	<u>Lab Water</u>
% Effluent	100	75	50	25	12.5	0	0
% Creek Water ¹	0	25	50	75	87.5	100	0
% Lab Water ¹	0	25	50	75	87.5	0	100

¹ Lab water shall be used for dilution series if Mill Creek is dry when samples are collected.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples collected during the waste discharge to Mill Creek except for flow, which shall be an estimate. Receiving water monitoring downstream of the discharge to Mill Creek is required even when there is no flow in Mill Creek other than flow from the Discharger’s effluent. The monitoring report shall clearly indicate when upstream receiving water monitoring has not been conducted because there is no water other than the discharge in Mill Creek. Receiving water monitoring shall include at least the following:

<u>Station</u>	<u>Description</u>
R-1	On Mill Creek, 100 feet upstream from the point of discharge
R-2	On Mill Creek, 200-300 feet downstream from the point of discharge

<u>Constituents</u>	<u>Units</u>	<u>Station</u>	<u>Sampling Frequency</u>
Flow	cfs	R-1	Monthly
Dissolved Oxygen	mg/L	R-1, R-2	Monthly
pH	standard units	R-1, R-2	Monthly
Turbidity	NTU	R-1, R-2	Monthly
Temperature	°F	R-1, R-2	Monthly
Conductivity @ 25°C	µmhos/cm	R-1, R-2	Monthly
Total Residual Chlorine	mg/L	R-1, R-2	Monthly
Priority Pollutants ¹	µg/L	R-1	Twice during permit term ²

¹ Conducted in accordance with “Priority Pollutant Monitoring” requirements above.

² Both sampling events shall occur between 21 October 2009 and 23 April 2010.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by Stations R-1 and R-2. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic life
- e. Visible films, sheens or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the water supply can be obtained from each water supply source. Water supply monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Conductivity @ 25°C ¹	µmhos/cm	Grab	Annually
Standard Minerals ²	mg/L	Grab	Annually

¹ Conductivity shall be reported as a weighted average of conductivity of all sources and the monitoring report shall include copies of supporting calculations.

² Standard minerals shall include all major cations and anions and include verification that the analysis is complete (i.e., cation/anion balance).

REPORTING

Monitoring results shall be submitted to the Regional Board by the **first day** of the second month following sample collection. Annual monitoring results shall be submitted by the **first day of the second month following each calendar year**.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that indicates clearly whether the discharge complies with waste discharge requirements.

If there is no discharge, the Discharger shall submit reports stating such at the frequencies described above (i.e., monthly, quarterly, etc.). The reports shall indicate when discharge ceased and when discharge is anticipated to resume.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

By **1 February** of each year, the Discharger shall submit a written report to the Executive Officer containing the following:

- a. The names and general responsibilities of all persons employed at the facility with responsibilities related to the discharge of waste under NPDES Permit CA0081256 (Standard Provision A.5).

- b. The names and telephone numbers of persons to contact regarding the facility for emergency and routine situations.
- c. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).

The Discharger may also be requested to submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

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

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

21 October 2005
(Date)

MSS:fmc: 10/21/05

INFORMATION SHEET

ORDER NO. R5-2005-0149
NPDES NO. CA0081256
KRAFT FOODS, INC.
VISALIA PLANT
TULARE COUNTY

I. INTRODUCTION

Kraft Foods, Inc., a California corporation, owns and operates a milk products processing plant at 715 North Divisadero Street in Visalia, California. Kraft Foods, Inc., is hereafter referred to as Discharger. The discharge was previously governed by Waste Discharge Requirements Order No. 97-122, originally adopted by the Regional Board on 20 June 1997. The Discharger submitted a Report of Waste Discharge (RWD), dated 17 December 2001, and applied for permit renewal to discharge waste under the National Pollutant Discharge Elimination System (NPDES).

II. BENEFICIAL USES OF THE RECEIVING WATER

The plant discharges to Mill Creek. Mill Creek is an ephemeral stream tributary to Cross Creek approximately 10 miles downstream of the discharge. During wet years, Cross Creek discharges to the Tule River, approximately 15 miles downstream of the confluence of Mill Creek with Cross Creek. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (hereafter Basin Plan) specifies beneficial uses of Valley Floor Waters and, therefore, Mill Creek as:

- 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 (including spawning) (WARM);
- wildlife habitat (WILD);
- support of rare, threatened, or endangered species (RARE); and
- groundwater recharge (GWR).

Based on information from the "Lines of Equal Elevation of Water Wells in Unconfined Aquifer," published by the Department of Water Resources in Spring 1995, the depth of groundwater in the region is about 95 feet below ground surface. The beneficial uses of the underlying groundwater are MUN, IND, PRO, AGR, REC-1, and REC-2.

Mill Creek is an intermittent stream. The intermittent nature of Mill Creek means that the designated beneficial uses must be protected, but that no credit for receiving water dilution is available. Dry conditions occur primarily in the summer months, but may also occur throughout the year, particularly in low rainfall years. The lack of dilution results in more stringent effluent limitations for attainment of agricultural water quality goals and aquatic life protection.

III. DESCRIPTION OF EFFLUENT

The Discharger's effluent consists of non-contact cooling water from the initial cooling cycle for three cottage cheese process starter tanks and from evaporation pump seals. The source water is groundwater

pumped from an on-site well, which is chlorinated to inhibit biological activity in the cooling system. The non-contact cooling water is discharged from the plant to a storm drain, which discharges to Mill Creek via Discharge 001. The non-contact cooling water is not treated prior to discharge.

The Discharger's RWD describes the discharge as follows:

Maximum Daily Flow Rate: 25,000 gallons per day

Based on data from monthly self-monitoring and laboratory reports submitted by the Discharger between December 2000 and November 2003, the characteristics of the discharge are as follows:

<u>Constituent</u>	<u>Units</u>	<u>Min</u>	<u>Max</u>	<u>Average</u>
Flow	million gallons per day (mgd)	--	--	0.02 ¹
Conductivity @ 25° C	µmhos/cm	4	270	155
pH	standard units	6.2	9.64	
Chlorine Residual	mg/L	0	1	0.21
Temperature	° C	16.2	44.6	26.2

¹ The Discharger reported the same flow of 0.02 mgd in each report submitted.

IV. SUMMARY OF CHANGES TO THE CURRENT ORDER

This Order includes changes from the current Order. A summary of the key changes is as follows:

A. Final Effluent Limitations

- Revision of the pH limit to reflect the range required by the water quality objective (WQO) for pH in the Basin Plan.
- Addition of total residual chlorine limit to comply with the narrative WQO for toxic substances from the Basin Plan interpreted using USEPA's recommended acute and chronic aquatic life criteria for chlorine.
- The Basin Plan states that "[a]ll waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances." The Basin Plan requires that "[a]s a minimum, compliance with this objective...shall be evaluated with a 96-hour bioassay." Order No. R5-2005-0149 requires both acute and chronic toxicity monitoring to evaluate compliance with this WQO.

The Basin Plan further states that "...effluent limits based upon acute biotoxicity tests of

effluents will be prescribed...” Effluent limitations for acute toxicity have been included in the Order.

B. Receiving Water Limitations

- Addition of receiving water limitations for ammonia, fecal coliform, pesticides, radionuclides, temperature, and taste and odor based on the water quality objectives from the Basin Plan.

C. Groundwater Limitations

- Addition of a groundwater limitation proscribing the discharge from causing underlying groundwater to contain waste constituents in concentrations greater than natural background quality.

D. Provisions

- A requirement to conduct priority pollutant monitoring of the effluent and receiving water to address deficiencies in monitoring required by the letter from the Regional Board dated 27 February 2001 to implement the requirements of the SIP. Monitoring for all priority pollutants is required for the effluent and receiving water.
- A requirement to install a totalizing flow measurement device to monitor the discharge to Mill Creek.

E. Monitoring and Reporting Program

- Addition of effluent and receiving water monitoring requirements for total residual chlorine to determine whether the plant’s effluent is contributing to an excursion of the narrative toxicity objective from the Basin Plan.
- Revision of the receiving water monitoring requirements to include receiving water monitoring downstream of the discharge even when effluent is the only flow in Mill Creek. Addition of this requirement allows the Regional Board to monitor parameters not measured for effluent monitoring, as well as to monitor changes in receiving water conditions from the effluent discharge point (Discharge 001) to the downstream sampling station (R-2).
- A requirement to conduct effluent and receiving water monitoring for priority pollutants two times at the end of the term of this Order to provide data for a reasonable potential analysis for the next Order and to comply with the requirements of the SIP.

V. REASONABLE POTENTIAL ANALYSIS AND EFFLUENT LIMITATIONS

The federal CWA mandates the implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to state or federal law (33 U.S.C., § 1311(b)(1)(C); 40 CFR 122.44(d)(1)). NPDES permits must incorporate discharge limits necessary to ensure that water

quality standards are met. This requirement applies to narrative criteria as well as to criteria specifying maximum amounts of particular pollutants. Pursuant to federal regulations, 40 CFR 122.44(d)(1)(i), NPDES permits must contain limits that control all pollutants that “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality.” Federal regulations, 40 CFR 122.44(d)(1)(vi), further provide that “[w]here a state has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits.”

Section 1.3 of the SIP requires that the Regional Board impose water quality-based effluent limitations for a priority pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR or NTR criterion or applicable site-specific Basin Plan objective, or (2) the ambient background concentration is greater than the CTR or NTR criterion or applicable site-specific Basin Plan objective and the pollutant is detected in the effluent, or (3) other information is available to determine that a water quality-based effluent limitation is necessary to protect beneficial uses.

The Discharger was issued an Order on 27 February 2001 pursuant to CWC Section 13267, requiring effluent and receiving water monitoring meeting the requirements of the SIP. The 13267 letter directed the Discharger to collect effluent and receiving water samples during two sampling events. These data were required in order to assist the Regional Board in conducting reasonable potential analyses (RPAs).

The Discharger submitted effluent monitoring data on 19 June 2003 for a single monitoring event, which partially fulfills the monitoring required in the 27 February 2001 letter. In addition, the data did not include analytical results for sixteen of the seventeen 2,3,7,8-TCDD congeners identified in the SIP. Therefore, the Regional Board is unable to conduct a complete RPA for CTR constituents.

Provision E.4 of this Order directs the Discharger to conduct a Priority Pollutant evaluation study within a time schedule. This Order also includes a reopener to allow the Regional Board to reopen this Order and establish effluent limitations or other requirements if necessary based on the results of the study.

The dates in the compliance schedule do not extend or supercede those in the 27 February 2001 13267 Order. Should the Discharger fail to comply with the compliance schedule, it would be appropriate to assess administrative civil liabilities based on the due dates in the 13267 Order.

1. Summary of Reasonable Potential Analysis – Non-CTR Constituents

Flow

Flow is limited to a maximum daily flow of 0.025 mgd based on the facility’s RWD.

pH

The Basin Plan requires that the pH of receiving waters not be depressed below 6.5 or raised above 8.3 standard units. The effluent limitation for pH implements this WQO from the Basin Plan.

Total Residual Chlorine

The Basin Plan states, "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." Based on data from monthly self-monitoring and laboratory reports submitted by the plant between December 2000 and November 2003, the chlorine concentration in the effluent averaged 0.21 mg/L (210 µg/L), with the highest concentration measured at 1 mg/L (1,000 µg/L). The USEPA has established a National Recommended Ambient Water Quality Criteria for Freshwater Aquatic Life Protection for chlorine of 19 µg/L as a 1-hour average (acute) concentration, and 11 µg/L as a 4-day average (chronic) concentration. Based on this information, there is a reasonable potential that the discharge may cause or contribute to an excursion of the narrative toxicity objective from the Basin Plan.

This Order includes effluent limitations for total residual chlorine calculated as 0.01 mg/L as a monthly average (AMEL) and 0.02 mg/L as a daily maximum (MDEL) using procedures in USEPA's *Technical Support Document for Water Quality-based Toxics Control*. The following equations are taken from the technical support document:

$$LTA_a = ECA_a \times \exp(0.5\sigma^2 - z\sigma)$$
$$LTA_c = ECA_c \times \exp(0.5\sigma_4^2 - z\sigma_4)$$
$$LTA = \min(LTA_c, LTA_a)$$
$$AMEL = LTA \times \exp(z\sigma_n - 0.5\sigma_n^2)$$
$$MDEL = LTA \times \exp(z\sigma - 0.5\sigma^2)$$

where

ECA_a = acute effluent concentration allowance (equals acute criterion if no dilution)

ECA_c = chronic effluent concentration allowance (equals chronic criterion if no dilution)

LTA_a = acute long-term average

LTA_c = chronic long-term average

LTA = most stringent long-term average

$AMEL$ = average monthly effluent limitation

$MDEL$ = maximum daily effluent limitation

σ = standard deviation

CV = coefficient of variation (where $\sigma^2 = \ln(CV^2 + 1)$)

z = z-statistic for 95th percentile probability (to calculate AMEL) or 99th percentile probability (to calculate LTAs and MDEL)

n = number of samples per month ($n = 4$ minimum)

Using the equations shown above, the water quality-based effluent limits developed for Chlorine Residual are summarized in Table 1.

Table 1
Water Quality-Based Effluent Limits
Chlorine Residual

Priority Pollutant	Aquatic Life Calculations											Selected Limits	
	Saltwater / Freshwater												
	ECA acute = C acute	ECA acute multiplier	LTA acute	ECA chronic = C chronic	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aquatic life	MDEL multiplier 99	MDEL aquatic life	AMEL	MDEL
ug/L		ug/L	ug/L		ug/L	ug/L		ug/L		ug/L	mg/L	mg/L	
Chlorine Residual ¹	19	0.174 ¹	3.3	11	0.321 ¹	3.5	3.3	2.13 ¹	7.029	5.76 ¹	19	0.007	.02

¹ Data obtained from the Discharger resulted in a CV value of 1.2.

Based on the monitoring data available, it appears the Discharger cannot consistently comply with the established limitations, and a compliance time schedule is needed. Since the Basin Plan narrative toxicity objective is not a new objective, a schedule of compliance for chlorine is included in an accompanying Time Schedule Order.

Conductivity

The Basin Plan states, on Page III-3 Chemical Constituents, that “*Waters shall not contain constituents in concentrations that adversely affect beneficial uses.*” For conductivity (EC), *Ayers R.S. and D.W. Westcott, Water Quality for Agriculture, Food and Agriculture Organization of the United Nations – Irrigation and Drainage Paper No. 29, Rev. 1, Rome (1985)*, reports levels above 700 µmhos/cm will reduce crop yield for sensitive plants. The University of California, Davis Campus, Agricultural Extension Service, published a paper, dated 7 January 1974, stating that there will not be problems to crops associated with salt if the EC remains below 750 µmhos/cm.

The maximum EC measurement for the Discharger’s effluent, based on monthly self-monitoring and laboratory reports submitted by the Facility between December 2000 and November 2003, was 270 µmhos/cm. The effluent conductivity does not exceed the agricultural water quality goals. Based on this information, the Regional Board has determined that effluent limitations for conductivity (EC at 25°C) are not required. This Order does, however, maintain the conductivity monitoring required from the previous Order.

2. Basis for Receiving Water Limitations

Receiving water limitations are based on water quality objectives from the Basin Plan and are a required part of this Order. They are included to protect beneficial uses of receiving waters. A receiving water condition not in conformance with a limitation is not necessarily a violation of the Order. The Regional Board may require an investigation to determine cause and culpability prior to asserting that a violation has occurred.

3. Basis for Groundwater Limitations

The Regional Board has determined that the discharge is not likely to impact the underlying groundwater. Therefore, this Order does not include specific groundwater limitations. This Order does include a requirement proscribing the discharge from causing underlying groundwater to contain waste constituents in concentrations greater than natural background quality.

4. Basis for Provisions

Provisions 1 through 8, and 10 through 13 are included in this Order to ensure compliance with the requirements of the Order pursuant to the CWA, CWC, implementing regulations and the Basin Plan. Provision 9, allowing the permit to be re-opened, is based on 40 CFR 122.62.

5. Basis for Self-Monitoring Requirements

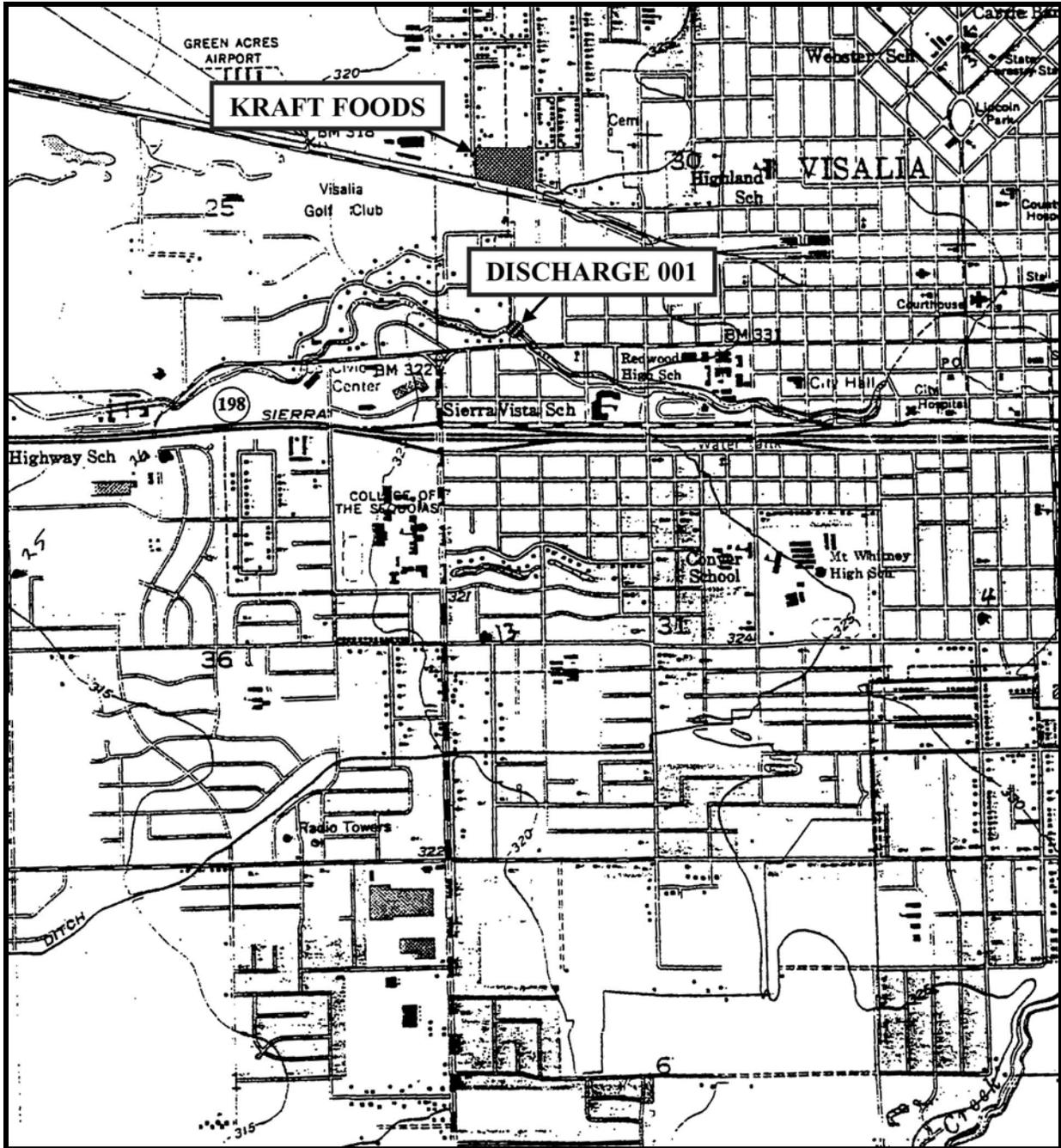
Pollutants to be monitored in the influent, effluent, and receiving water include parameters for which effluent limitations are specified, which may affect water quality, or with water quality objectives in the Basin Plan.

REOPENER

The conditions of discharge in this Order were developed based on currently available technical information, currently available discharge and surface water quality information, applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. As additional information is obtained, decisions will be made concerning the best means of assuring the highest water quality possible and that could involve substantial cost. It may be appropriate to reopen this Order if applicable laws and regulations change, or if new information necessitates the implementation of new or revised effluent limitations to adequately protect water quality.

CEQA

The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the CEQA (Public Resources Code Section 21000 et seq.) in accordance with CWC Section 13389.

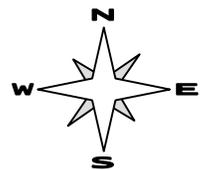


Drawing Reference:
Section 30, T18S, R25E, MDB&M

U.S.G.S TOPOGRAPHIC MAPS
7.5 MINUTE QUADRANGLE

SITE LOCATION MAP
WDRs ORDER NO. R5-2005-0149
NPDES NO. CA0081256

Kraft Foods, Inc.
Visalia Plant
Tulare County



NOT TO
SCALE

Suggested Analytical Methods
Requirement to Submit Monitoring Data
 10 September 2001

CTR #	Constituent	CAS Number	Criterion Quantitation Limit (ug/L or noted)	Suggested Test Methods
VOLATILE ORGANICS				
28	1,1-Dichloroethane	75343	0.5	EPA 8260B
30	1,1-Dichloroethene	75354	0.5	EPA 8260B
41	1,1,1-Trichloroethane	71556	0.5	EPA 8260B
42	1,1,2-Trichloroethane	79005	0.5	EPA 8260B
37	1,1,2,2-Tetrachloroethane	79345	0.5	EPA 8260B
75	1,2-Dichlorobenzene	95501	0.5	EPA 8260B
29	1,2-Dichloroethane	107062	0.5	EPA 8260B
	cis-1,2-Dichloroethene	156592	0.5	EPA 8260B
31	1,2-Dichloropropane	78875	0.5	EPA 8260B
101	1,2,4-Trichlorobenzene	120821	0.5	EPA 8260B
76	1,3-Dichlorobenzene	541731	0.5	EPA 8260B
32	1,3-Dichloropropene	542756	0.5	EPA 8260B
77	1,4-Dichlorobenzene	106467	0.5	EPA 8260B
17	Acrolein	107028	5	EPA 8260B
18	Acrylonitrile	107131	2	EPA 8260B
19	Benzene	71432	0.5	EPA 8260B
20	Bromoform	75252	0.5	EPA 8260B
34	Bromomethane	74839	1	EPA 8260B
21	Carbon tetrachloride	56235	0.5	EPA 8260B
22	Chlorobenzene (mono chlorobenzene)	108907	0.5	EPA 8260B
24	Chloroethane	75003	0.5	EPA 8260B
25	2- Chloroethyl vinyl ether	110758	1	EPA 8260B
26	Chloroform	67663	0.5	EPA 8260B
35	Chloromethane	74873	0.5	EPA 8260B
23	Dibromochloromethane	124481	0.5	EPA 8260B
27	Dichlorobromomethane	75274	0.5	EPA 8260B
36	Dichloromethane	75092	0.5	EPA 8260B
33	Ethylbenzene	100414	0.5	EPA 8260B
88	Hexachlorobenzene	118741	1	EPA 8260B
89	Hexachlorobutadiene	87683	1	EPA 8260B
91	Hexachloroethane	67721	1	EPA 8260B

CTR #	Constituent	CAS Number	Criterion Quantitation Limit (ug/L or noted)	Suggested Test Methods
94	Naphthalene	91203	10	EPA 8260B
38	Tetrachloroethene	127184	0.5	EPA 8260B
39	Toluene	108883	0.5	EPA 8260B
40	trans-1,2-Dichloroethylene	156605	0.5	EPA 8260B
43	Trichloroethene	79016	0.5	EPA 8260B
44	Vinyl chloride	75014	0.5	EPA 8260B
	Methyl-tert-butyl ether (MTBE)	1634044	0.5	EPA 8260B
	Trichlorofluoromethane	75694	5	EPA 8260B
	1,1,2-Trichloro-1,2,2-Trifluoroethane	76131	10	EPA 8260B
	Styrene	100425	0.5	EPA 8260B
	Xylenes	1330207	0.5	EPA 8260B
SEMI-VOLATILE ORGANICS				
60	1,2-Benzanthracene	56553	5	EPA 8270C
85	1,2-Diphenylhydrazine	122667	1	EPA 8270C
45	2-Chlorophenol	95578	2	EPA 8270C
46	2,4-Dichlorophenol	120832	1	EPA 8270C
47	2,4-Dimethylphenol	105679	2	EPA 8270C
49	2,4-Dinitrophenol	51285	5	EPA 8270C
82	2,4-Dinitrotoluene	121142	5	EPA 8270C
55	2,4,6-Trichlorophenol	88062	10	EPA 8270C
83	2,6-Dinitrotoluene	606202	5	EPA 8270C
50	2-Nitrophenol	25154557	10	EPA 8270C
71	2-Chloronaphthalene	91587	10	EPA 8270C
78	3,3'-Dichlorobenzidine	91941	5	EPA 8270C
62	3,4-Benzofluoranthene	205992	10	EPA 8270C
52	4-Chloro-3-methylphenol	59507	5	EPA 8270C
48	4,6-Dinitro-2-methylphenol	534521	10	EPA 8270C
51	4-Nitrophenol	100027	5	EPA 8270C
69	4-Bromophenyl phenyl ether	101553	10	EPA 8270C
72	4-Chlorophenyl phenyl ether	7005723	5	EPA 8270C
56	Acenaphthene	83329	1	EPA 8270C
57	Acenaphthylene	208968	10	EPA 8270C
58	Anthracene	120127	10	EPA 8270C

CTR #	Constituent	CAS Number	Criterion Quantitation Limit (ug/L or noted)	Suggested Test Methods
59	Benzidine	92875	5	EPA 8270C
61	Benzo(a)pyrene (3,4-Benzopyrene)	50328	0.1	EPA 8270C
63	Benzo(g,h,i)perylene	191242	5	EPA 8270C
64	Benzo(k)fluoranthene	207089	2	EPA 8270C
65	Bis(2-chloroethoxy) methane	111911	5	EPA 8270C
66	Bis(2-chloroethyl) ether	111444	1	EPA 8270C
67	Bis(2-chloroisopropyl) ether	39638329	10	EPA 8270C
68	Bis(2-ethylhexyl) phthalate	117817	3	EPA 8270C
70	Butyl benzyl phthalate	85687	10	EPA 8270C
73	Chrysene	218019	5	EPA 8270C
81	Di-n-butylphthalate	84742	10	EPA 8270C
84	Di-n-octylphthalate	117840	10	EPA 8270C
74	Dibenzo(a,h)-anthracene	53703	0.1	EPA 8270C
79	Diethyl phthalate	84662	2	EPA 8270C
80	Dimethyl phthalate	131113	2	EPA 8270C
86	Fluoranthene	206440	10	EPA 8270C
87	Fluorene	86737	10	EPA 8270C
90	Hexachlorocyclopentadiene	77474	1	EPA 8270C
92	Indeno(1,2,3-c,d)pyrene	193395	0.05	EPA 8270C
93	Isophorone	78591	1	EPA 8270C
98	N-Nitrosodiphenylamine	86306	1	EPA 8270C
96	N-Nitrosodimethylamine	62759	5	EPA 8270C
97	N-Nitrosodi-n-propylamine	621647	5	EPA 8270C
95	Nitrobenzene	98953	10	EPA 8270C
53	Pentachlorophenol	87865	0.2	EPA 8270C
99	Phenanthrene	85018	5	EPA 8270C
54	Phenol	108952	1	EPA 8270C
100	Pyrene	129000	10	EPA 8270C
INORGANICS				
	Aluminum	7429905	50	EPA 6020/200.8
1	Antimony	7440360	5	EPA 6020/200.8
2	Arsenic	7440382	1	EPA 1632

CTR #	Constituent	CAS Number	Criterion Quantitation Limit (ug/L or noted)	Suggested Test Methods
15	Asbestos	1332214	0.2 MFL >10um	EPA/600/R-93/116(PCM)
	Barium	7440393	100	EPA 6020/200.8
3	Beryllium	7440417	1	EPA 6020/200.8
4	Cadmium	7440439	0.25	EPA 1638/200.8
5a	Chromium (total)	7440473	2	EPA 6020/200.8
5b	Chromium (VI)	18540299	5	EPA 7199/1636
6	Copper	7440508	0.5	EPA 6020/200.8
14	Cyanide	57125	5	EPA 9012A
	Fluoride	7782414	100	EPA 300
	Iron	7439896	100	EPA 6020/200.8
7	Lead	7439921	0.5	EPA 1638
8	Mercury	7439976	0.0005 (11)	EPA 1669/1631
	Manganese	7439965	20	EPA 6020/200.8
9	Nickel	7440020	5	EPA 6020/200.8
10	Selenium	7782492	5	EPA 6020/200.8
11	Silver	7440224	1	EPA 6020/200.8
12	Thallium	7440280	1	EPA 6020/200.8
	Tributyltin	688733	0.06	EV-024/025
13	Zinc	7440666	10	EPA 6020/200.8
PESTICIDES - PCBs				
110	4,4'-DDD	72548	0.02	EPA 8081A
109	4,4'-DDE	72559	0.01	EPA 8081A
108	4,4'-DDT	50293	0.01	EPA 8081A
112	alpha-Endosulfan	959988	0.02	EPA 8081A
103	alpha-Hexachlorocyclohexane (BHC)	319846	0.01	EPA 8081A
	Alachlor	15972608	1	EPA 8081A
102	Aldrin	309002	0.005	EPA 8081A
113	beta-Endosulfan	33213659	0.01	EPA 8081A
104	beta-Hexachlorocyclohexane	319857	0.005	EPA 8081A
107	Chlordane	57749	0.1	EPA 8081A
106	delta-Hexachlorocyclohexane	319868	0.005	EPA 8081A

CTR #	Constituent	CAS Number	Criterion Quantitation Limit (ug/L or noted)	Suggested Test Methods
111	Dieldrin	60571	0.01	EPA 8081A
114	Endosulfan sulfate	1031078	0.05	EPA 8081A
115	Endrin	72208	0.01	EPA 8081A
116	Endrin Aldehyde	7421934	0.01	EPA 8081A
117	Heptachlor	76448	0.01	EPA 8081A
118	Heptachlor Epoxide	1024573	0.01	EPA 8081A
105	Lindane (gamma-Hexachlorocyclohexane)	58899	0.019	EPA 8081A
119	PCB-1016	12674112	0.5	EPA 8082
120	PCB-1221	11104282	0.5	EPA 8082
121	PCB-1232	11141165	0.5	EPA 8082
122	PCB-1242	53469219	0.5	EPA 8082
123	PCB-1248	12672296	0.5	EPA 8082
124	PCB-1254	11097691	0.5	EPA 8082
125	PCB-1260	11096825	0.5	EPA 8082
126	Toxaphene	8001352	0.5	EPA 8081A
	Atrazine	1912249	1	EPA 8141A
	Bentazon	25057890	2	EPA 643/ 515.2
	Carbofuran	1563662	5	EPA 8318
	2,4-D	94757	10	EPA 8151A
	Dalapon	75990	10	EPA 8151A
	1,2-Dibromo-3-chloropropane (DBCP)	96128	0.01	EPA 8260B
	Di(2-ethylhexyl)adipate	103231	5	EPA 8270C
	Dinoseb	88857	2	EPA 8151A
	Diquat	85007	4	EPA 8340/ 549.1/HPLC
	Endothal	145733	45	EPA 548.1
	Ethylene Dibromide	106934	0.02	EPA 8260B/ 504
	Glyphosate	1071836	25	HPLC/ EPA 547
	Methoxychlor	72435	10	EPA 8081A
	Molinate (Ordram)	2212671	2	EPA 634
	Oxamyl	23135220	20	EPA 8318/ 632
	Picloram	1918021	1	EPA 8151A

CTR #	Constituent	CAS Number	Criterion Quantitation Limit (ug/L or noted)	Suggested Test Methods
	Simazine (Princep)	122349	4	EPA 8141A
	Thiobencarb	28249776	1	HPLC/ EPA 639
16	2,3,7,8-TCDD (Dioxin)	1746016	5.00E-06	EPA 8290 (HRGC) MS
	2,4,5-TP (Silvex)	93765	1	EPA 8151A
	Diazinon	333415	0.25	EPA 8141A/ GCMS
	Chlorpyrifos	2921882	1	EPA 8141A/ GCMS
OTHER CONSTITUENTS				
	Ammonia (as N)	7664417		EPA 350.1
	Chloride	16887006		EPA 300.0
	Flow			
	Hardness (as CaCO ₃)			EPA 130.2
	Foaming Agents (MBAS)			SM5540C
	Nitrate (as N)	14797558	2,000	EPA 300.0
	Nitrite (as N)	14797650	400	EPA 300.0
	pH		0.1	EPA 150.1
	Phosphorus, Total (as P)	7723140		EPA 365.3
	Specific conductance (EC)			EPA 120.1
	Sulfate		500	EPA 300.0
	Sulfide (as S)			EPA 376.2
	Sulfite (as SO ₃)			SM4500-SO3
	Temperature			
	Total Disolved Solids (TDS)			EPA 160.1