CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0157

WASTE DISCHARGE REQUIREMENTS
FOR
CLOSURE, POST CLOSURE AND CORRECTIVE ACTION OF SURFACE IMPOUNDMENTS
AT
KRUGER FOODS, INC -
SMS BRINERS VEGETABLE BRINING FACILITY
SAN JOAQUIN COUNTY

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

1. Kruger Foods, Inc. (hereafter Discharger) owns SMS Briners, Inc that operates a vegetable brining facility near Farmington. The facility was previously regulated by Waste Discharge Requirements (WDRs) Order No. 92-053 in conformance with Title 27 of California Code of Regulations (previously Chapter 15), Division 2, Subdivision 1 (hereafter Title 27).
2. On 31 January 2004, the Discharger submitted a Report of Waste Discharge (RWD) describing the process for closing their surface impoundments. The WDRs is based on the RWD and Title 27. This WDRs include the change in ownership from John Souza to Kruger Foods, Inc; a time schedule for closing the surface impoundments that complies with Title 27; and an update to their evaluation monitoring and corrective action programs.
3. The facility is at 1775 East Highway 4, Stockton. This property is described by San Joaquin County Assessor's Parcel Number 183-140-08. The facility is surrounded by agricultural fields. Attachment A, which is incorporated herein and made a part of this order, shows the location of this facility
4. The facility's existing wastewater containment system consists of two surface impoundments. The design volume for the North and South impoundments are 9.6 and 6.5 million gallons, respectively. Both impoundments were constructed in 1975 with flexible membrane liners. The location of the surface impoundments is shown on Attachment B, which is incorporated herein and made a part of this Order.
5. Section 20080(d) of Title 27 states: "Units which were operating, or had received all permits necessary for construction and operation, on or before November 27, 1984, are designated as "existing" Units. This includes disposal sites classified under previous regulations and unclassified Units. Dischargers shall continue to operate existing Units under existing classifications and WDRs until those classifications and requirements are reviewed in accordance with §21720(c)." Waste Discharge Requirements Order No. 92-053 mandated closure of the surface impoundments by 1 November 1994. The previous owner as well as the current Discharger has failed to close these impoundments.

6. The following are dates in which the Regional Board has asked the previous and current Dischargers in writing to comply with Subchapter 15 or Title 27 by closing or retrofitting their surface impoundments to the current regulatory standards.

    - 20 December 1988
    - 10 February 1989
    - 17 October 1989
    - 8 December 1989
    - 24 May 1990
    - 27 March 1992 (WDR Order No. 92-053)
    - 5 October 1995
    - 1 May 2001
    - 2 February 2002
    - 16 December 2003

    No retrofit or closure of surface impoundments has occurred. The original flexible liners are in poor repair with numerous holes exposed to the ground surface. Their condition does not comply with the prescriptive standards for Class II surface impoundments presented in Title 27, Table 4.1. This order is requiring the Discharger to "clean close" their impoundments per the requirements of Section 21400 of Title 27.

7. In December 1990, the Discharger completed installation of their Class I deep injection well (Souza #1) for the disposal of brine waste. The injection well is screened within a sand interval from –1720 feet msl to –2050 feet msl, which is beneath the Great Valley Sequence marine unconformity. The injection of brine waste into the subsurface is permitted by U.S. Environmental Protection Agency under UIC Permit Number CA 192000001.

8. The waste stream generated from the facility consists of a pickling solution of salt (sodium chloride) combined with potable water. Prior to installation of the injection well, approximately 7,500 gallons per day (gpd) of process wastewater were discharged to the surface impoundments resulting in approximately two million gallons of wastewater per year. The last known discharge of wastewater to the impoundments occurred on 18 November 2003.

WASTEWATER CLASSIFICATION

9. The wastewater discharged into the surface impoundments prior to injection includes three components. The first component is process water, which incorporates waste brine, wash water, and brine tank rinse water. Wastewater has historically been discharged to the North and South Ponds. Since the mid-1990's, wastewater has only been discharged to the North Pond; wastewater contained in this pond has subsequently been evaporated or pumped to the Class I injection well. The second component is storm water run off, which incorporates runoff from the brining pads and from facility roadways. Final component, as part of their corrective action program, extracted groundwater from MW-1 is discharged into the North Pond.

10. 'Designated waste' is defined in California Water Code, §13173, as a nonhazardous waste which consists of, or contains pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality standards, or which could cause degradation of waters of the state. This facility wastewater exceeds the applicable water quality standards and therefore is a 'Designated waste' as illustrated in following table:

Chemistry of Wastewater mg/l

Constituent	Cauliflower Brine	Cucumber Brine	Water Quality Goals
Sodium	62,800	52,800	30 – Taste and Odor Threshold
Chloride	109,000	90,000	106 – Agricultural Water Quality Goal
Sulfate	1,125	9	500 – USEPA Primary MCL
Manganese	1.1	1.2	0.05 – USEPA Secondary MCL
Iron	4.4	5.8	0.3 – USEPA Secondary MCL
Copper	0.30	0.33	0.170 – CA Public Health Goal
Nitrate	101	2	45 – CA Primary MCL
Total Dissolved Solids	186,600	137,600	450 – Agricultural Water Quality Goal
pH	5.0	3.3	<6.5 – Agricultural Water Quality Goal

SITE DESCRIPTION

11. From the Dischargers boring logs the hydraulic conductivity of the native soils underlying the Unit is estimated between 5×10^{-3} cm/sec (medium sand) and 4.7×10^{-9} cm/sec (clay).
12. Approximately 40 miles south of the facility is the Great Valley Fault. This is the closest Holocene fault to the facility. Its maximum magnitude is 6.7 and the peak ground acceleration for the site is 0.244 g.
13. Land uses within 1,000 feet of the facility are agricultural fields. There are no residences within 1,000 feet of the facility.

14. Contours of equal mean annual precipitation depth prepared by the USGS (1969) show that the SMS Briners facility is located between the 12 inch and 14 inch isohyetal contours. DWR adopted these isohyetal contours in their publication California Rainfall Summary, Monthly Total Precipitation, 1849-1980 (DWR, 1981). The facility receives an average of 12.89 inches of precipitation per year as measured at the Manteca station (southwest of SMS Briners). Annual mean precipitation as measured at the Stockton Fire Station #4 (west of SMS Briners) is 16.61 inches. These two stations do not collect pan evaporation data. The nearest such pan evaporation data station appears to be in the City of Lodi (northwest of SMS Briners). Mean pan evaporation is 65.15 inches per year as measured at the City of Lodi Station.

15. The 100-year, 24-hour precipitation event is estimated to be 3.65 inches, based on Department of Water Resources' bulletin entitled Rainfall Depth-Duration-Frequency for California, revised November 1982, updated August 1986. This compares very well to a value of 3.5 inches, obtained from an iso-pluvial map for northern California published by the Western Regional Climate Center (http://www.wrcc.dri.edu/).

16. The waste management facility is not within a 100-year flood plain based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map 0490A (May 15, 1980), Community-Panel Number 060299.

17. There are 18 domestic, industrial, or agricultural groundwater supply wells within one mile of the site.

18. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basin, Fourth Edition (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin.

SURFACE WATER CONDITIONS

19. Surface drainage is toward North Fork Little John's Creek in the North Valley Hydrologic Area, Duck Little Johns Unit (531.40) of the San Joaquin River Basin.

20. The designated beneficial uses of the North Fork Little John's Creek, as specified in the Basin Plan, are municipal and domestic supply; agricultural supply; industrial process and power supply; water contact and non-contact water recreation; cold fresh water habitat; wildlife habitat and groundwater recharge. The Discharger's monitors surface water by sampling Little Johns Creek at the following locations, C1, C2, C3 and C4. These sampling locations are shown on Attachment C, which is incorporated herein and made a part of this Order.

21. Surface water samples are collected from North Little Johns Creek. Chloride concentrations in background samples ranged from 1.8 to 15 mg/l in 2003. The downstream location C4 had a reading of 690 mg/l in November 2003. The increasing levels of chloride in the downstream sample locations suggest that operations at this facility have impacted surface waters.

GROUNDWATER CONDITIONS

22. The designated beneficial uses of the groundwater, as specified in the Basin Plan, are domestic and municipal water supply; agricultural supply; industrial service supply and industrial process supply.

23. Groundwater beneath the site is monitored in two zones. The shallow zone groundwater is unconfined. During various monitoring events, it was encountered between 99.72 (MW3A - 4/17/02) to 125.96 ("A" shallow – 10/24/97) feet below ground surface. The elevations of the potentiometric surface ranges from –46.55 feet msl to –22.58 feet msl and fluctuates seasonally as much as 15 feet. The deep zone has been defined as semi-confined. Elevation of the deep zone fluctuates from –47.28 feet msl (P6) to –21.25 feet msl (P4).

24. In April 2003, groundwater flow in the shallow zone was to the northwest. During the same period, groundwater flow in the deep zone was also to the northwest. The average groundwater gradient was approximately 0.002 to 0.01 ft/ft in the summer and 0.0006 to 0.0009 ft/ft in the fall. The Discharger has calculated the velocity of groundwater in the shallow and deep zones to be 2.7×10^{-5} cm/sec and 5.0×10^{-4} cm/sec, respectively.

Water Quality Protection Standard

25. The Water Quality Protection Standard, that have been calculated by the Discharger, are:

Water Quality Protection Standard

Constituent	Shallow Zone (MW2)	Deep Zone (MW3B)
TDS	600 mg/l	460 mg/l
Chloride	89 mg/l	27 mg/l

Groundwater Monitoring

26. The existing ground water monitoring system consists of monitoring wells and production wells. Monitoring wells are identified as MW-1, MW-2, MW-3A, MW-3B, MW-4A, and MW-4B. Production wells are identified as A, B, D and E. Wells MW-1, MW-2, MW-3A and MW-4A monitor shallow zones of the Upper Laguna Formation, while MW-3B and MW-4B monitor deeper zones of the Upper Laguna Formation (see Attachment C).

27. The Discharger's detection monitoring program for groundwater does not satisfy the requirements contained in Section 20405 of Title 27. At this facility, groundwater flow direction has historically changed due to seasonal variations as well as the pumping of

groundwater in the area. Therefore the downgradient monitoring points also varies based on seasonal variation and pumping. Because of this, compliance point monitoring wells are required in several locations around the pond. This does not exist at the present time.

28. The Discharger has no detection-monitoring program for the unsaturated zone beneath the surface impoundments. However, soil samples collected from beneath the south pond show that overlying impoundment brine seepage has migrated to the water table.

Evaluation Monitoring Program

29. The evaluation-monitoring network is inadequate because the lateral and vertical extent of the chloride plume has not been defined. Isoconcentration contours derived from monitoring data show only an estimated extent of the chloride-contaminated groundwater. Section 20425(b) of Title 27 states: the Discharger shall collect and analyze all data necessary to assess the nature and extent of the release from the Unit. This assessment shall include a determination of the spatial distribution and concentration of each COC throughout the zone affected by the release.

Corrective Action Monitoring Program

30. On 26 January 1990, SMS Briners agreed to source removal and groundwater cleanup by extracting groundwater. Currently, the Discharger is extracting groundwater from the monitoring well MW1. This well is adjacent to the western levee of the surface impoundments. Historical groundwater elevation data indicates that the extraction well flow rate has little or no influence on capturing the plume of chloride contaminated groundwater. Section 20430(d) of Title 27 states: In conjunction with the corrective action measures, the Discharger shall establish and implement a water quality monitoring program to demonstrate the effectiveness of the corrective action program.

Groundwater Degradation

31. Groundwater monitoring has occurred at this facility since 1987. The waste stream generated by SMS Briners is high in sodium chloride; therefore, chloride because of its mobility has served as a useful indicator for evaluating impacts of plant operations on groundwater quality. The following monitoring wells have elevated levels of chloride: MW1, MW2 (background), MW3A, MW3B, MW4A, and MW4B. On 7 January 2003, monitoring well MW1 had chloride detected at 4,100 mg/l, which is the highest historical detection in groundwater at this facility. Seasonal fluctuations in chloride concentrations exceed at times 2000 mg/l, with the highest readings occurring in winter. During the same monitoring event, MW1 had Total dissolved solids detected at 10,000 mg/l.

Closure of Waste Management Unit(s)

32. The closure of each surface impoundment shall be under the direct supervision of a California registered civil engineer or certified engineering geologist.

33. At closure of each surface impoundments, all residual wastes, including liquids, sludges, precipitates, settled solids, and liner materials and adjacent natural geologic materials contaminated by wastes, shall be completely removed and discharged to a waste management unit approved by Regional Board staff. If after reasonable attempts, the Discharger demonstrates the removal of all remaining contamination is infeasible, the surface impoundment shall be closed as a landfill.

CEQA AND OTHER CONSIDERATIONS

34. The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code §21000, et seq., and the CEQA guidelines, in accordance with Title 14, CCR, §15301.

35. This order implements:

    a. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition;

    b. The prescriptive standards and performance goals of California Code of Regulations, effective 18 July 1997, and subsequent revisions;

36. Section 13267(b) of California Water Code provides that: "In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The monitoring and reporting program required by this Order and the attached "Monitoring and Reporting Program No. R5-2004-0157" are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

37. Section 13268 of the California Water Code provides that: (a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b), and

    (b) (1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs

PROCEDURAL REQUIREMENTS

38. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.

39. The Regional Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

40. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

41. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812, within 30 days of the date of issuance of this Order. Copies of the laws and regulations applicable to the filing of a petition are available on the Internet at http://www.swrcb.ca.gov/water_laws/index.html and will be provided on request.

IT IS HEREBY ORDERED pursuant to Sections 13263 and 13267 of the California Water code that Order No. 92-053 is rescinded, and that the Kruger Foods/SMS Briners', its agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted there under, shall comply with the following:

A. PROHIBITIONS

1. The discharge of 'hazardous waste' at this facility is prohibited. For the purposes of this Order, the terms 'hazardous waste' and 'designated waste' are as defined in Division 2 of Title 27 of the CCR.

2. The discharge of solid waste or liquid waste to land, to surface waters, to surface water drainage courses, or to non-permitted aquifers is prohibited.

3. The discharge of wastes outside of an above ground storage tank or into the injection well is prohibited.

4. The discharge of wastes into the existing surface impoundment or a portion of a surface impoundment is prohibited.

5. No more than six-inches of accumulated rainfall may collect in the surface impoundment.

B. DISCHARGE SPECIFICATIONS

1. Wastes shall only be discharged into the Class I injection well under UIC Permit Number CA 192000001.

2. Solids in the surface impoundments shall be removed. Prior to removal of these solids, sufficient samples shall be taken for their characterization and classification pursuant to Article 2, Subchapter 2, Chapter 3, Division 2 of Title 27. The rationale for the sampling protocol used, the results of this sampling, and a rationale for classification of the solids shall be submitted to Regional Board staff for review.

C. FINANCIAL ASSURANCE

1. The Discharger shall, by **30 April of each year**, submit for approval by the Executive Officer, plans with detailed cost estimates and a demonstration of assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the waste management unit. The Discharger shall provide the assurances of financial responsibility to the Regional Board as required by Title 27 CCR, Division 2, Subdivision 1, Chapter 6. The assurances of financial responsibility shall provide that funds for corrective action shall be available to the Regional Board upon the issuance of any order under California Water Code, Division 7, Chapter 5. The Discharger shall adjust the cost annually to account for inflation and any changes in facility design, construction, or operation.

D. PROVISIONS

1. The Discharger shall comply with the Standard Provisions and Reporting Requirements, dated September 2003, which are hereby incorporated into this Order. The Standard Provisions and Reporting Requirements contain important provisions and requirements with which the Discharger must comply. A violation of any of the Standard Provisions and Reporting Requirements is a violation of these waste discharge requirements.

2. The Discharger shall comply with Monitoring and Reporting Program No. R5-2004-0157, which is attached to and made part of this Order. This compliance includes, but is not limited to, maintenance of waste containment facilities and precipitation and drainage controls and monitoring groundwater, and surface waters throughout the active life of the waste management units and the post-closure maintenance period. A violation of Monitoring and Reporting Program No. R5-2004-0157 is a violation of these waste discharge requirements.

3. The Discharger shall maintain legible records of the volume and type of waste discharged from all waste generating operations. In addition, the Discharger shall maintain legible records of the volume of wastewater discharged into the injection well. These records shall be available for review by representatives of the Regional Board and of the State Water Resources Control Board, copies of these records shall be sent to the Regional Board.

4. If clean closure of the surface impoundments were determined infeasible, the Discharger shall provide proof to the Regional Board **within sixty days after completing final closure** that the deed to the surface impoundment facility property, or some other instrument that is normally examined during title search, has been modified to include, in perpetuity, a notation to any potential purchaser of the property stating that:

    a. the parcel has been used for disposal of liquid wastes;

    b. land use options for the parcel are restricted in accordance with the post-closure land uses set forth in the post-closure plan and in WDRs for the surface impoundment; and

    c. in the event that the Discharger defaults on carrying out either the post-closure maintenance plan or any corrective action needed to address a release, then the responsibility for carrying out such work falls to the property owner.

5. The Discharger shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature, extent, and impact of the noncompliance.

6. The fact that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order shall not be regarded as a defense for the Discharger's violations of the Order.

7. To assume ownership or operation under this Order, the succeeding owner or operator shall apply in writing to the Regional Board requesting transfer of the Order within 14 days of assuming ownership or operation of this facility. The request shall contain the requesting entity's full legal name, the State of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Regional Board, and a statement 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 California Water Code. Transfer of this Order shall be approved or disapproved by the Regional Board.

8. The Discharger shall maintain a groundwater monitoring system for each of the facility's waste management units that meet the requirements in Sections 20385, 20415(b), 20420, 20425, and 20430 of Title 27.

9. The Discharger shall maintain all monitoring points meet the standards in Section 20415(k)(4)(D) of Title 27 and Department of Water Resources Bulletin 74-90.

10. The Regional Board will review this Order periodically and may revise requirements when necessary.

E. REPORTING REQUIREMENTS

1. The Discharger shall comply with the reporting requirements specified in this Order, in Monitoring and Reporting Program Order No. R5-2004-0157 and in the Standard Provisions and Reporting Requirements dated September 2003.

2. Pursuant to Section 13267(b) of California Water Code and these WDRs the Discharger shall complete the tasks outlined in these WDRs and the attached Monitoring and Reporting Program No. R5-2004-0157 in accordance with the following time schedule. The required technical reports are necessary in regulating the closure of the surface impoundments at this facility, and determining whether the closure is incompliance with the California Water Code and protective of water quality:

Task	Compliance Date
a. No process water, wastewater, or stormwater from any operational area shall be discharged to either the North or South Pond at any time.	**Forthwith**
b. Remove all piping that transports water, groundwater, wastewater, or stormwater to the surface impoundment.	**Forthwith**
c. Surface Impoundment Closure	
i. Remove all remaining liquid from the surface impoundments and isolate the settled solid wastes from rainfall and ponded stormwater.	**22 October 2004**
ii. Install a staff gauge at the lowest elevation of each surface impoundment. This staff gauge	**22 October 2004**

must be clearly marked at the allowable six-inch fluid limit temporarily allowed in the impoundment.	
iii. Submit a stormwater response plan, which identifies all corrective action measures necessary to comply with Prohibition A5.	**22 October 2004**
iv. Submit a closure plan for the surface impoundments (North and South Ponds) that complies with Title 27.	**31 January 2005**
v. Begin the physical removal of the surface impoundments.	**2 June 2005**
vi. Document the closure of the two surface impoundments in a matter that complies with Section 21400 of Title 27.	**31 October 2005**

d. Detection Monitoring Program

i. All monitoring points shall comply with Provisions D8 and D9 of this Order.	**1 January 2005**
ii. All non-operational wells must be abandoned according to all applicable regulations.	**1 January 2005**

e. Evaluation Monitoring Program

i. The Discharger shall submit an amended report of waste discharge that complies with Sections 20420(k)(5) and 20425(d)(2)(A – D) of Title 27. This report shall present all data associated with defining the nature and extent of the releases from the North and South Ponds. This assessment shall include a determination of the vertical and lateral distribution and concentration of each COC throughout the zone affected by the release. The limit shall be defined by the established water quality protection standard for each zone as presented in Finding 25 of this Order.	**29 October 2004**

f. Corrective Action Monitoring Program

i. The Discharger shall implement pumping of groundwater from Monitoring Well MW1.	**1 December 2004**
ii. The Discharger shall submit an amended Report of Waste Discharge (RWD) for corrective action measures. This RWD shall be based on the data collected during the evaluation-monitoring program investigation that complies with Section 20425 of Title 27.	**25 March 2005**
iii. All corrective action monitoring wells and extraction wells, which are **not** located within the footprint of the existing surface impoundments shall be installed in compliance with Section 20415(b)(4).	**1 June 2005**
iv. All corrective action monitoring wells and extraction wells, which are located within the footprint of the existing surface impoundments shall be installed in compliance with Section 20415(b)(4).	**1 November 2005**
iii. All approved corrective action measures shall be installed and operational.	**1 December 2005**
ii. The Discharger shall establish and implement a water quality monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program can be based on the requirements for an evaluation monitoring program (under §20425), and shall be effective in determining whether compliance with the Water Quality Protection Standard in Finding 25 have been achieved.	**15 December 2005**
iii. The Discharger shall submit semi-annual progress reports, on the effectiveness of the corrective action program.	**January 31st and June 30th each year**

g. Storm Water Controls Completion Report - The Discharger shall submit a completion report certified by a California Professional Engineer, or equivalent, that all storm water controls have been installed and are operational. This document shall include all design as built drawings, as well as water balance calculations for the systems successful operation.	**22 October 2004**

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 15 October 2004.

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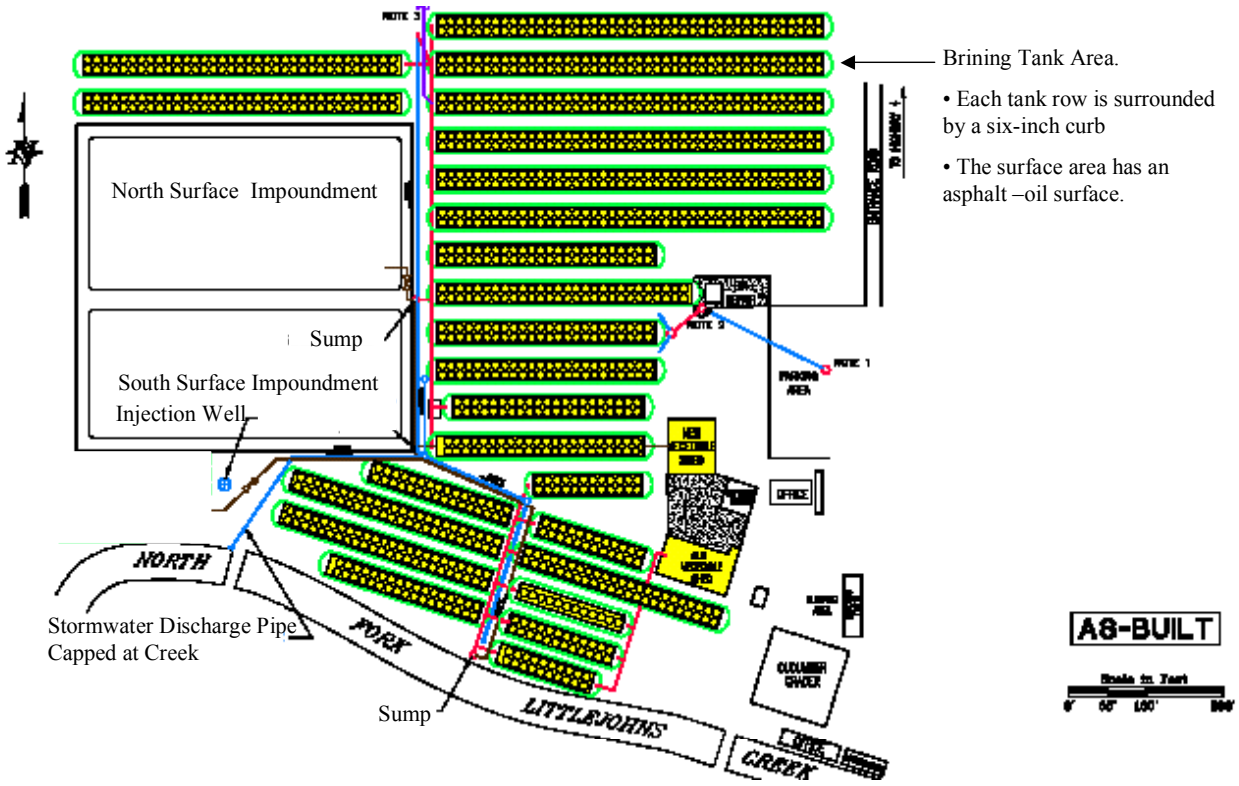
THOMAS R. PINKOS, Executive Officer

Attachments

KRUGER FOODS / SMS BRINERS

LOCATION MAP

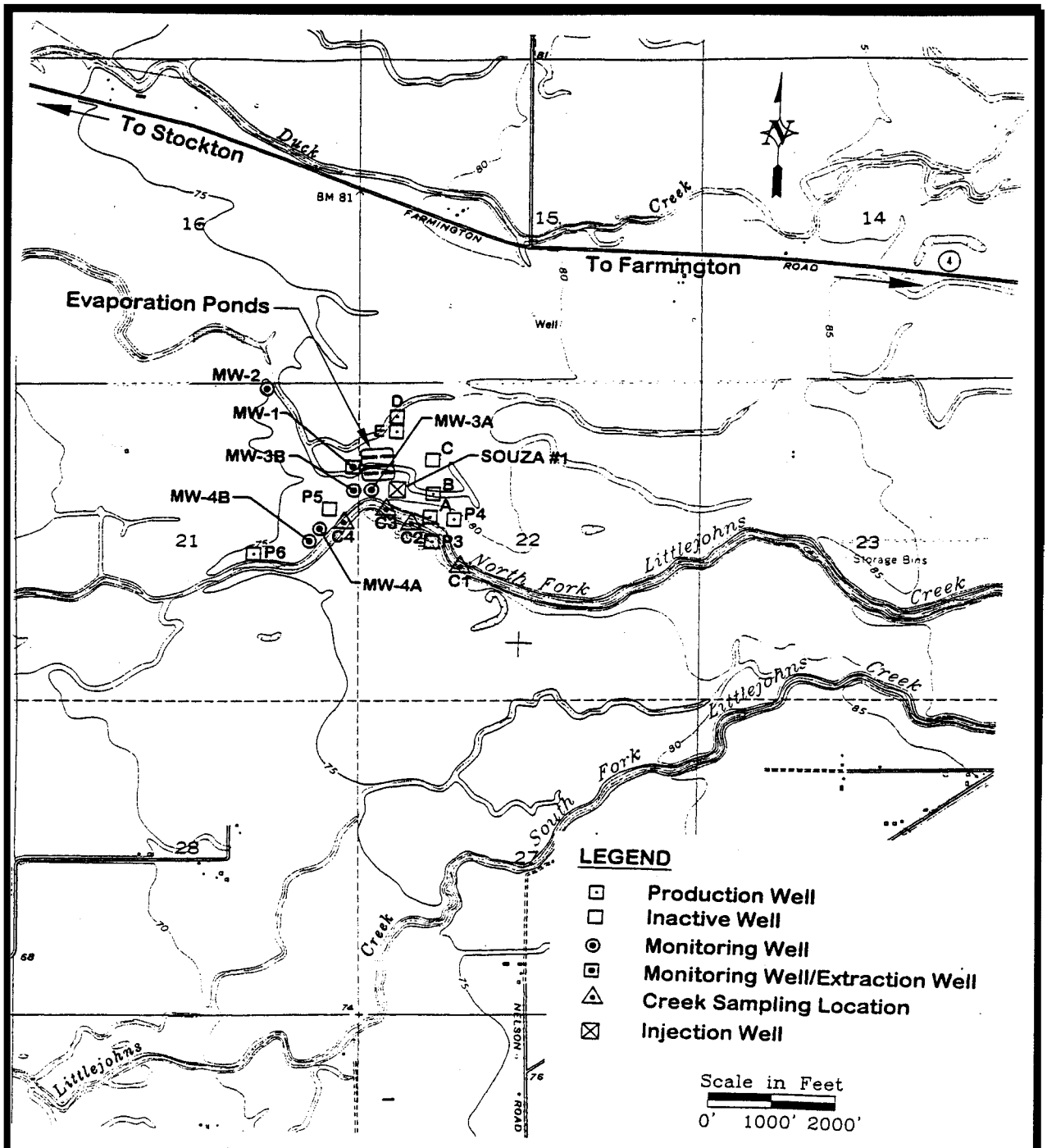
- ATTACHMENT A -



KRUGER FOODS / SMS BRINER

FACILITY MAP

- ATTACHEMENT B -



KRUGER FOODS / SMS BRINERS

GROUNDWATER AND SURFACE WATER MONITORING POINTS

- ATTACHMENT C -

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0157
FOR
CLOSURE, POST CLOSURE AND CORRECTIVE ACTION OF SURFACE IMPOUNDMENTS
AT
KRUGER FOODS, INC -
SMS BRINERS VEGETABLE BRINING FACILITY
SAN JOAQUIN COUNTY

Compliance with this Monitoring and Reporting Program, with Title 27, California Code of Regulations, Section 20005, et seq. (hereafter Title 27), and with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements for Nonhazardous Solid Waste Discharges Regulated by Title 27*, dated April 2000, is ordered by Waste Discharge Requirements Order No. 92 053.

Existing monitoring wells show that the past discharge from one or both of the S. M. S. Briners surface impoundments has degraded ground water quality. This is a Corrective Action monitoring program, the purpose of which is to determine whether measures taken by S. M. S. Briners (hereafter discharger) are sufficient to clean up the effects of past waste discharges to groundwater in compliance with the California Code of Regulations, Title 27.

REQUIRED MONITORING REPORTS

Report		Due
1.	Staff Gauge Monitoring	**Monthly**
2.	Groundwater Monitoring	**Semiannually**
3.	Surface Water Monitoring	**Semiannually**
4.	Annual Monitoring Summary Report	**Annually**

REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring and Reporting Program and as required in Order No. R5-2004-0157 and the Standard Provisions and Reporting Requirements. Reports which do not comply with the required format will be **REJECTED** and the Discharger shall be deemed to be in noncompliance with the waste discharge requirements. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack thereof. Data shall also be submitted in a digital format acceptable to the Executive Officer.

Field and laboratory tests shall be reported in each monitoring report. Semiannual, and annual monitoring reports shall be submitted to the Board in accordance with the following schedule for the calendar period in which samples were taken or observations made.

Sampling Frequency	Reporting Frequency	Reporting Periods End	Report Date Due
Weekly	Monthly	end of each Month	10th day following the end of month
Quarterly	Semiannually	30 June 31 December	**31 July** **31 January**
Semiannually	Semiannually	30 June 31 December	**31 July** **31 January**
Annually	Annually	31 December	**31 January**

The Discharger shall submit an **Annual Monitoring Summary Report** to the Board covering the previous monitoring year; a discussion of compliance with the current waste discharge requirements and compliance with the calculated Water Quality Protection Standard.

WATER QUALITY PROTECTION STANDARD

The Water Quality Protection Standard, that have been calculated by the Discharger, shall not exceed these limits at the point of compliance for the following constituents of concern.

	Water Quality Protection Standard		
Constituent	Shallow Zone (MW2)	Deep Zone (MWB)	Impacted Well (MW1)* 10/8/03
TDS	600 mg/l	460 mg/l	5400 mg/l
Chloride	89 mg/l	27 mg/l	2300 mg/l

* Point of Compliance

The annual report shall:

- Identify **all distinct bodies of surface and ground water** that could be affected in the event of a release from a Unit or portion of a Unit. This list shall include at least the uppermost

aquifer and any permanent or ephemeral zones of perched groundwater underlying the facility.

- Include a map showing the monitoring points and background monitoring points for the surface water monitoring program, and the groundwater monitoring program. The map shall include the point of compliance in accordance with §20405 of Title 27.

- Evaluate the perennial direction(s) of groundwater movement within the uppermost groundwater zone(s).

If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the site, the Discharger may request modification of the Water Quality Protection Standard.

MONITORING

Ground Water

The Discharger shall operate and maintain a groundwater detection monitoring system that complies with the applicable provisions of §20415 and §20420 of Title 27 in accordance with a Detection Monitoring Program approved by the Executive Officer. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the approved Sample Collection and Analysis Plan.

Within each Semi-Annual report, the Discharger shall determine the groundwater flow rate and direction in the uppermost aquifer and in any zones of perched water and in any additional zone of saturation monitored pursuant to this Monitoring and Reporting Program, and report the results semiannually, including the times of highest and lowest elevations of the water levels in the wells.

Hydrographs of each well shall be submitted showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake. A map of the potentiometric surface, which includes all wells from similar water bearing zones, shall be prepared quarterly and submitted semi-annually.

Groundwater samples shall be collected from the point-of-compliance wells, background wells, and any additional wells added as part of the approved groundwater monitoring system. Samples shall be collected and analyzed for the monitoring parameters in accordance with the methods and frequency specified in Table I.

The monitoring parameters shall also be evaluated each sampling event with regards to the cation/anion balance, and the results shall be graphically presented using a Stiff diagram, a Piper graph, or a Schueller plot. Samples for the constituents of concern specified in Table I shall be collected and analyzed in accordance with the proper EPA method.

The existing ground water monitoring system consists of monitoring wells and production wells used for monitoring. Monitoring wells are identified as MW-1, MW-2, MW-3A, MW-3B, MW-4A, MW-4B. Production wells are identified as A, B, D and E. Wells MW-1, MW-2, MW-3A and MW-4A monitor shallow zones of the Upper Laguna Formation, while MW-3B and MW-4B monitor deeper zones of the Upper Laguna Formation. The Discharger shall continue to monitor these wells for the constituents and parameters specified below in Table I at the specified frequency.

Surface Water

Surface water sampling stations C1, C2, C3 and C4 in Littlejohns Creek shall be sampled within 72 hours after the first storm of the season which produces flows in Littlejohns Creek. Sampling will continue on a quarterly basis as flow in the Creek allows. Surface runoff sampling points SR1 and SR2 shall be monitored monthly during storm runoff. The Discharger shall continue to monitor the surface water for the constituents and parameters specified below in Table II. In no case are samples required more frequently than once per month.

Rain Water within the Surface Impoundments

Pending closure of the existing surface impoundments, the Discharger shall monitor the staff gauge in the surface impoundment for compliance with the WDRs. At a minimum, observations shall be made weekly and submitted to the Board monthly. The discharger shall notify the Board immediately if the liquid in the surface impoundments exceed the allowed six-inch level-limit. If the limit cannot be achieved within 48 hours of that exceedance, describe to the Regional Board in writing what actions are being taken to implement the response plan in Section E.2.iii. to reduce the liquid level below six inches forthwith. Monitoring of the surface impoundments waste level may cease, once closure begins.

FACILITY MONITORING

Facility Inspection

Annually, prior to the anticipated rainy season, but no later than **30 September**, the Discharger shall conduct an inspection of the facility. At a minimum, the inspection shall assess damage to the drainage control system, groundwater monitoring equipment, containment structures, asphalt surface conditions and wastewater discharge system. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. By **1 December** of each year, the Discharger shall submit an annual report describing the results of the inspection and the repair measures implemented, including photographs of the problem and the repairs.

Storm Events

The Discharger shall inspect all precipitation, diversion, and drainage facilities for damage **within 7 days** following *major storm events*. Necessary repairs shall be completed **within 30 days** of the inspection. The Discharger shall report any damage and subsequent repairs within 45 days of completion of the repairs, including photographs of the problem and the repairs.

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

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

15 October 2004
Date

Table I
Groundwater Monitoring Program

Parameter/Constituent	Report in Units of	Monitoring Frequency	Reporting Frequency
Field Parameters			
Temperature	°C	Semiannual	Semiannual
Turbidity	NTUs	Semiannual	Semiannual
Specific Conductance	µmhos/cm	Semiannual	Semiannual
pH	mg/l	Semiannual	Semiannual
Monitoring Parameters			
Total Dissolved Solids	mg/l	Semiannual	Semiannual
Total Hardness	mg/l	Semiannual	Semiannual
Aluminum	mg/l	Semiannual	Semiannual
Bicarbonate	mg/l	Semiannual	Semiannual
Calcium	mg/l	Semiannual	Semiannual
Chloride	mg/l	Semiannual	Semiannual
Magnesium	mg/l	Semiannual	Semiannual
Nitrate	mg/l	Semiannual	Semiannual
Potassium	mg/l	Semiannual	Semiannual
Sodium	mg/l	Semiannual	Semiannual
Sulfate	mg/l	Semiannual	Semiannual

Table II
Surface Water Monitoring Program

Parameter/Constituent	Report in Units of	Reporting Frequency
Field Parameters		
Temperature	°C	Semiannual
Turbidity	NTUs	Semiannual
Specific Conductance	µmhos/cm	Semiannual
pH	mg/l	Semiannual
Monitoring Parameters		
Total Dissolved Solids	mg/l	Semiannual
Total Hardness	mg/l	Semiannual
Aluminum	mg/l	Semiannual
Bicarbonate	mg/l	Semiannual
Calcium	mg/l	Semiannual
Chloride	mg/l	Semiannual
Magnesium	mg/l	Semiannual
Nitrate	mg/l	Semiannual
Potassium	mg/l	Semiannual
Sodium	mg/l	Semiannual
Sulfate	mg/l	Semiannual