

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
1102-A Laurel Lane
San Luis Obispo, California 93401

ORDER NO. 87-138

WASTE DISCHARGE REQUIREMENTS
FOR
VINTNERS INTERNATIONAL COMPANY,
GONZALES WINERY
MONTEREY COUNTY

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

1. Gonzales and Company, Incorporated, a predecessor to Vintners International Company, Inc., filed a Report of Waste Discharge, in accordance with Section 13260 of the California Water Code. The report was filed for authorization to discharge winery process wastewater within the Salinas River Sub-basin.
2. Vintners International Company, Inc., (hereafter Discharger), obtained ownership and now operates a winery located in the City of Gonzales, Monterey County. It discharges winery wastewater to a 110-acre land area located about two miles northeast of the winery. Facility locations are shown on Attachments "A" and "B" of this order.
3. An average of 350,000 gallons per day (1,326 m³/day) of winery wastewater are discharged at this facility. Winery wastewater consists of washdown water, grape washwater, and non-toxic cleaners. Estimated average monthly flow during the peak processing month is 0.49 MGD (1,856 m³/day). The treatment facility consists of screens, equalization basin, storage ponds, and land area. Wastewater will be spray-irrigated on 80 acres of forage crop located within the land area. Capacity of the discharge area is estimated to be 0.35 MGD annually.
4. Engineering consultants submitted a report in 1983, outlining the proposed winery wastewater land treatment system, including a water balance indicating there is sufficient area available to treat and dispose of projected reclaimed wastewater volumes. Wastewater, rainwater, and supplemental water will be limited to an application rate of two inches (5 cm) per week.

5. Average characteristics of raw industrial wastewater from six samples taken in November and December, 1981, and two samples taken in December, 1982, were as follows:

<u>Constituent</u>	<u>Concentration (mg/l)</u>	
	<u>1981</u>	<u>1982</u>
Total Dissolved Solids (Fixed)	838	1060
Suspended Solids	2120	1042
BOD ₅	1551	6845
Total Kjeldahl Nitrogen (as N)	23.3	72
Nitrate	1.4	-
Ammonia	-	39
Total Phosphorus	-	160
Phosphate	13.8	-
Sodium	101	137
Chloride	114	90
Sulfate	135	325
pH (pH Units)	4.3	6.0-6.4

6. The land discharge area is located on relatively flat, westerly-tilted topography consisting of alluvial soils extending about one thousand feet in depth. Alluvial soils consist of mixtures of gravels, sands, silts, and clays. An unconfined water table occurs between 205 and 265 feet beneath the site. The nearest waterwell (T16S/R5E/21R1) is located 2,000 feet (610 m) southwest of the site. Mineral quality of three samples collected between 1980 and 1982 were as shown below:

<u>Units</u>	<u>Range</u>
EC	1200 - 1300
Total Dissolved Solids (from E.C.) mg/l	467 - 838
Sodium	93 - 125
Sulfate	70
Chloride	180 - 266
Nitrate (as N)	2.1 - 7.5

7. Permeability of surface soils to a depth of ten feet (3 m) below the ground surface is generally moderate to slow depending on the occurrence of low permeability clay lenses. The Discharger plans to modify and improve permeability by slip-plowing to a six foot (2 m) depth. Potential for perched ground water exists above clay lenses in the vicinity of discharge.
8. The Salinas River is located four miles southwest of the discharge area and flows in a northwesterly direction to the Pacific Ocean at Monterey Bay.

9. The Water Quality Control Plan, Central Coastal Basin, (Basin Plan) was adopted by the Board on March 14, 1975, and approved by the State Water Resources Control Board on March 20, 1975. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
10. An areawide waste treatment management plan, entitled Water Quality Management Plan for the Monterey Bay Area (208 Plan), was adopted by the Association of Monterey Bay Area Governments, a designated agency, on July 12, 1978, and subsequently certified by the State Water Resources Control Board on September 21, 1978. The 208 Plan identifies, in general terms, impacts on water quality resulting from agricultural practices. The 208 Plan encourages irrigation and fertilizer management practices that minimize impacts on water quality.
11. Present and anticipated beneficial uses of groundwater in the vicinity of the discharge include:
 - a. Domestic Supply;
 - b. Agricultural Supply; and,
 - c. Industrial Supply.
12. Presumed present and anticipated beneficial uses of Johnson Creek, which flows westerly to the Salinas River, that could be affected by the discharge include: Wildlife habitat and Non-contact water recreation.
13. State Department of Health Services' criteria for use of reclaimed water is in Title 22, Chapter 3, of the California Administrative Code. The Board has consulted with the State Department of Health Services regarding the regulation of this discharge.
14. These waste discharge requirements are for an existing facility and are exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et. seq.) in accordance with Section 15301, Chapter 3, Title 14, of the California Administrative Code.
15. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure this and mitigate any potential adverse changes in water quality due to the discharge.

16. On July 1, 1987, the Board notified the Discharger and interested agencies and persons of its intent to revise waste discharge requirements for the discharge and provided them with a copy of the proposed order and an opportunity to submit written views and comments.
17. After considering all comments pertaining to this discharge during a public hearing on September 4, 1987, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, Vintners International Company, Inc., its agents, successors, and assigns, may discharge waste from its Gonzales Winery providing compliance is maintained with the following:

(Note: other prohibitions and conditions, definitions, and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984. Applicable paragraphs are referenced in paragraph D.3. of this Order.)

A. Prohibitions

1. Discharge to other than storage ponds, equalization basin, or irrigation areas shown in Attachment "B" is prohibited.
2. Discharge of any wastes to adjacent drainageways or adjacent properties is prohibited.
3. Discharge of domestic effluent to the winery wastewater system is prohibited.
4. Discharge of other than winery wastewater is prohibited.

B. Discharge Specifications

1. Flow averaged for each day of operation over each month shall not exceed 0.49 million gallons (1,326 m³).
2. Flow averaged for each day of operation over each year shall not exceed 0.35 million gallons (1,856 m³).
3. Effluent discharged to irrigation areas shall not exceed the following limitations:

<u>Parameter</u>	<u>Units</u>	<u>Maximum</u>
Specific Conductance (EC)	umho/cm	2200
Total Dissolved Solids	mg/l	1500

4. Surface drainage shall be excluded from entering irrigation areas.
5. Freeboard shall exceed 20 inches (0.5 m) in basin and ponds.
6. Discharge shall occur in a crop irrigation mode that insures pollutant removal and control of odors. Organic or hydraulic overloading of irrigation areas, as evidenced by sulfide slimes, malodorous gas production, or effluent ponding, shall not occur.
7. Effluent discharged shall be at least 20 feet (6 m) from property lines and from monitoring wells.
8. Waterwells in the discharge area shall be sealed and capped to prevent waste water from directly contacting well water.
9. Prior to irrigation, wastewater shall pass through a screen of appropriate mesh size to minimize clogged sprinkler orifices and to prevent nuisance odors.
10. The discharge shall not contain cleaning agents, solvents, or other constituents in concentrations detrimental to waters, soils, plants, or animals.
11. Basin and ponds shall be sized to retain wastewater from storms or wet-weather seasons having a predicted frequency of one in 100 years.
12. Aeration equipment shall be installed as needed in basin and ponds to prevent nuisance odor problems.
13. Dikes shall be installed as needed within the irrigation area to comply with Prohibition A.2.
14. Industrial process brines such as water demineralizer concentrate and boiler blowdown, shall be disposed in a manner acceptable to the Executive Officer.

C. Ground Water Limitations

1. The discharge shall not cause constituent concentrations in the groundwater downgradient of the disposal area to violate the following:

<u>Constituent</u>	<u>Units</u>	<u>Minimum</u>	<u>Maximum</u>
Nitrate (as N)	mg/l	-	8
Chemical Oxygen Demand	mg/l	-	50
pH	pH units	6.5	8.4
Sodium	mg/l		200.
Chloride	mg/l		250.
Sulfate	mg/l		250.

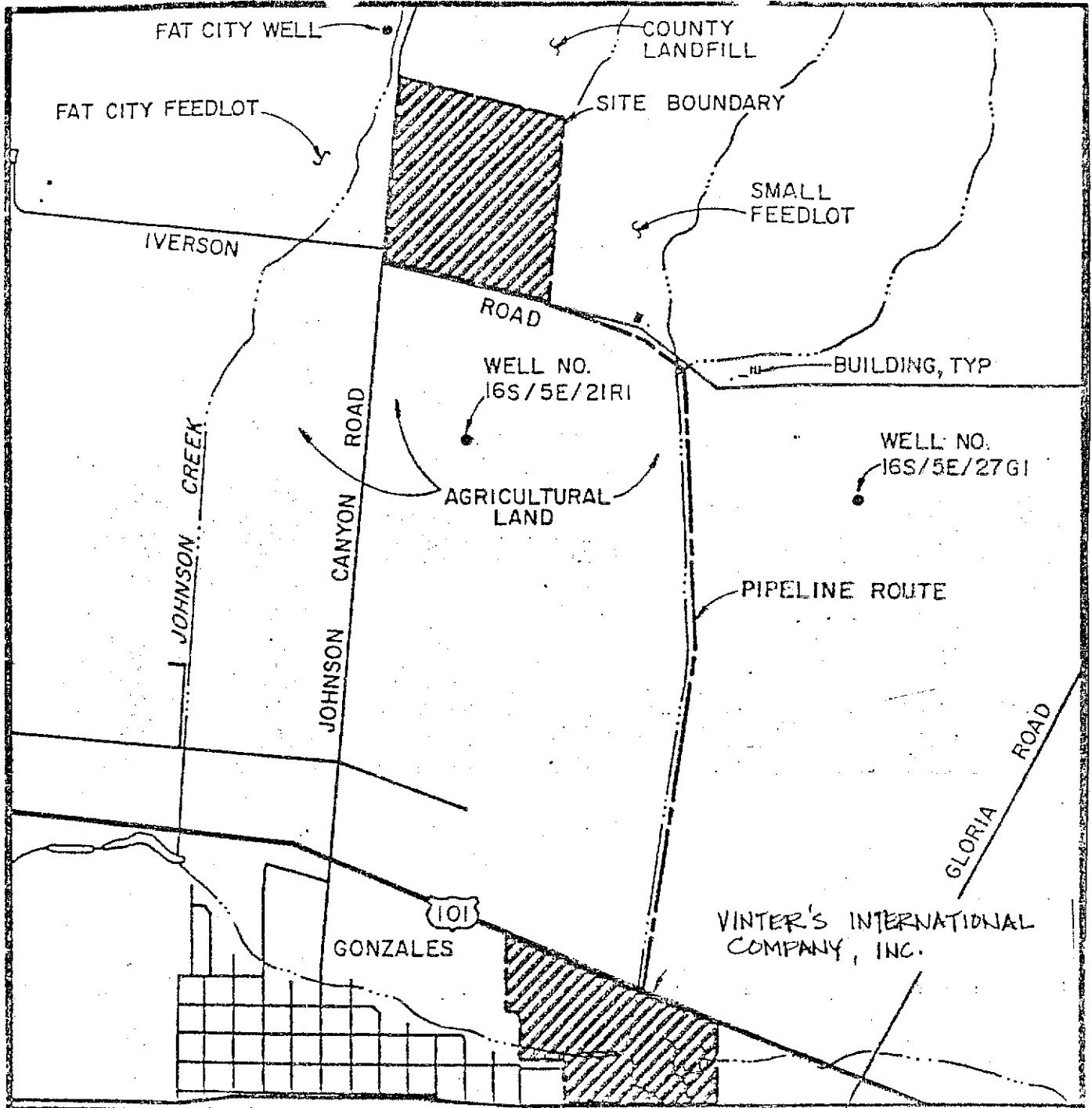
2. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying groundwaters, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area.
3. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Administrative Code.

D. Provisions

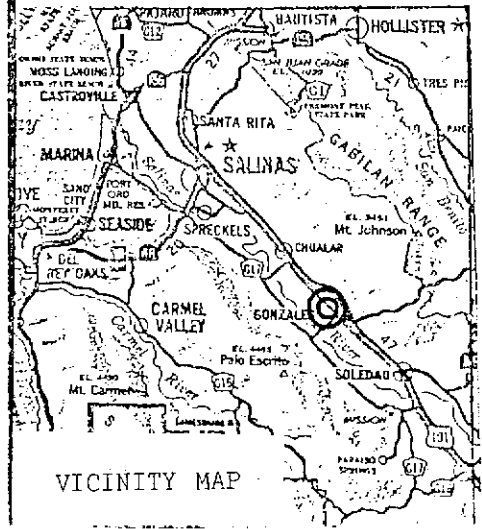
1. This Order supersedes and replaces Order No. 83-69 which is hereby rescinded.
2. Discharger shall comply with "Monitoring and Reporting Program No. 87-138", as specified by the Executive Officer.
3. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984; except items A.5., A.8. & A.17.
4. Pursuant to Title 23, Chapter 3, Subchapter 9, of the California Administrative Code, the Discharger must submit a written report to the Executive Officer not later than March 1, 1992, addressing:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,
 - b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.
5. Wastewater system shall be operated and maintained according to an operation and maintenance manual acceptable to the Executive Officer. The manual shall be periodically updated as necessary. A copy of the current operations and maintenance manual shall be sent to the Regional Board office.

I, WILLIAM R. LEONARD, 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 Coast Region, on September 4, 1987.

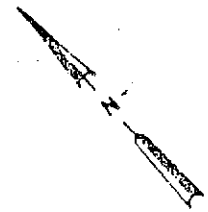
Executive Officer

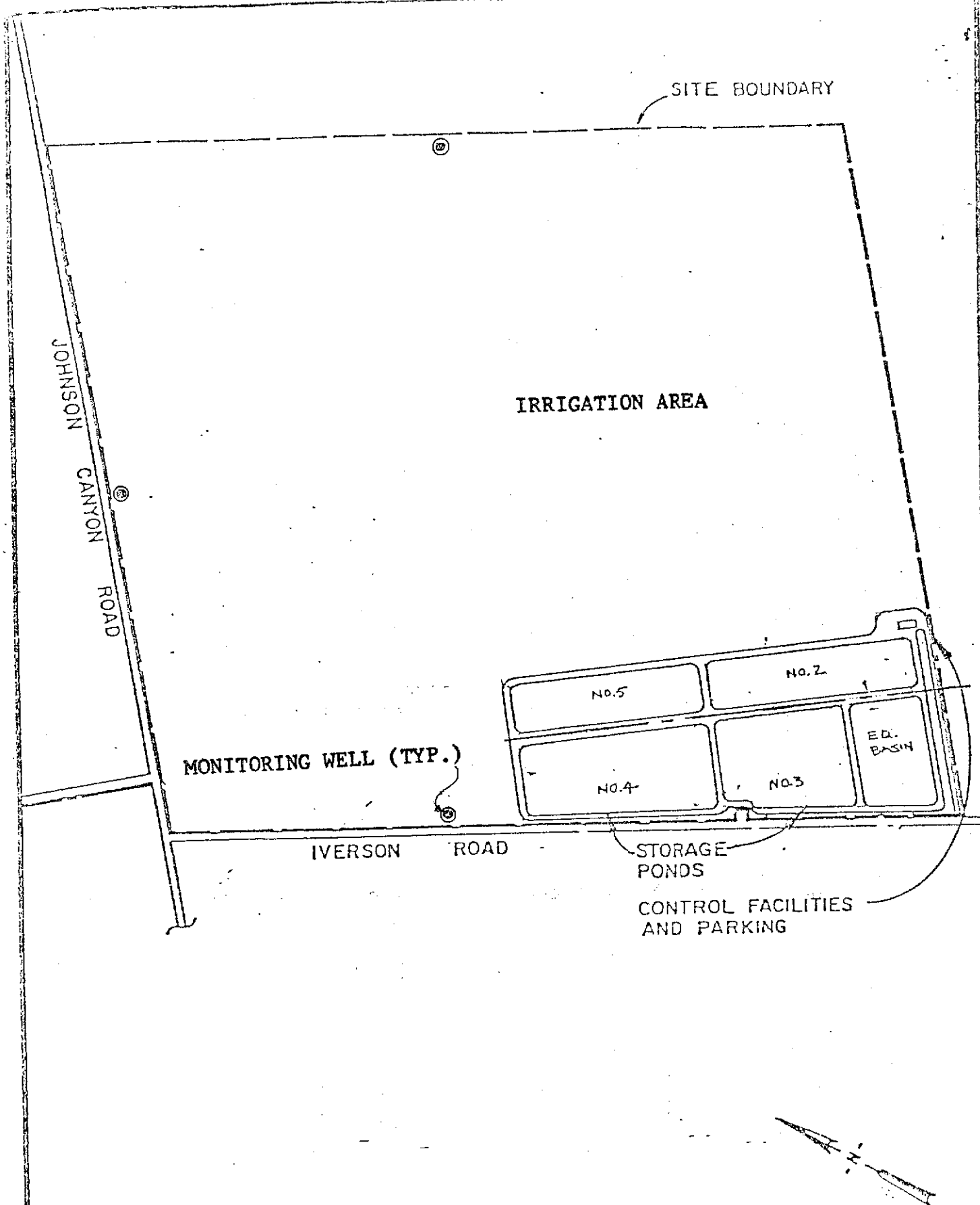


SOUTHERN PACIFIC



ATTACHMENT "A"
 VINTER'S INTERNATIONAL
 COMPANY, INC.
 GONZALES WINERY
 APPROX SCALE: 1" = 2000'





ATTACHMENT "B"
VINTNER'S INTERNATIONAL CO. INC.
WASTEWATER IRRIGATION SYSTEM
FOR THE GONZALES WINERY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM NO. 87-138
FOR
VINTNERS INTERNATIONAL COMPANY, INCORPORATED,
GONZALES WINERY
MONTEREY COUNTY
(REVISED FEBRUARY, 1989)

Supply Water Monitoring

Representative samples of the winery water supply shall be collected and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum sampling Frequency</u>
Total Dissolved Solids	mg/l	Grab	Annually
Sodium	mg/l	Grab	"
Chloride	mg/l	Grab	"
Nitrate (as N)	mg/l	Grab	"

Effluent Monitoring

Representative samples of the winery wastewater discharged to wastewater irrigation areas shall be collected and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum sampling Frequency</u>
Daily Flow	MGD	Metered	Daily
Mean Daily Flow	MGD	Calculated	Monthly
pH	pH Units	Grab	Weekly
EC	micro umhos/cm	Grab	Weekly
BOD ⁵	mg/l	8-hr. composite	Quarterly (Mar, June, Sept, Dec)
COD	mg/l	8-hr. composite	" " " "

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum sampling Frequency</u>
Total Dissolved Solids	mg/l	8-hr. composite	Semi-annually (June & Dec.)
Sodium	mg/l	" " "	" "
Chloride	mg/l	" " "	" "
Total Suspended Solids	mg/l	" " "	" "
Total Phosphorous	mg/l	" " "	" "
Total Kjeldahl Nitrogen (as N)	mg/l	Grab	" "
Nitrate Nitrogen(as N)	mg/l	8-hr. composite	" "
Nitrite Nitrogen(as N)	mg/l	" " "	" "
Sulfate	mg/l	" " "	" "

Ground Water Monitoring

Ground water monitoring wells shall be established upgradient and downgradient of the wastewater discharge area. The upgradient well the domestic well located at the east corner of the treatment ponds. The downgradient well is the irrigation well located along Iverson Road along the west side of the treatment ponds. Representative samples of the ground water in each well shall be collected after purging standing water from the well and analyzing it as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum sampling Frequency</u>
pH	pH Units	Grab	Quarterly (Mar, June, Sept, Dec.)
EC	umhos/cm	"	" " "
COD	mg/l	"	" " "
TDS	mg/l	"	" " "
Sodium	mg/l	"	" " "
Chloride	mg/l	"	" " "
Nitrate (as N)	mg/l	"	" " "

Soil Moisture Study

Three neutron probe access tubes shall be installed in each of the five subareas of the active spray disposal area. Each of the access tubes shall extend to a minimum depth of five feet. Soil moisture profiles (percent of moisture) shall be conducted monthly verify that wastewater application past the root zones of grasses is minimal.


Wastewater Equalization Pond and
Irrigation Area Monitoring

Discharger shall make daily inspections of the wastewater system. During inspections, notes shall be kept on compliance with all applicable Discharge Specifications B.4.-B.7., B.10., and B.13. in Order No. 87-138. Copies of the inspection notes shall be forwarded to the Regional Board with the monitoring reports.

Reporting

Daily, weekly, and monthly monitoring results shall be submitted by the 20th day of April, July, October, and January.

ORDERED BY



WILLIAM LEONARD
Executive Officer

March 9, 1989

Date

RBA:mm

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM NO. 87-138
FOR
VINTNERS INTERNATIONAL COMPANY, INCORPORATED,
GONZALES WINERY
MONTEREY COUNTY

Supply Water Monitoring

Representative samples of the winery water supply shall be collected and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Sampling Frequency</u>
Total Dissolved Solids	mg/l	Grab	Annually
Sodium	mg/l	Grab	"
Chloride	mg/l	Grab	"
Nitrate (as N)	mg/l	Grab	"

Effluent Monitoring

Representative samples of the winery wastewater discharged to waste-water irrigation areas shall be collected and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Sampling Frequency</u>
Daily Flow	MGD	Metered	Daily
Mean Daily Flow	MGD	Calculated	Monthly
pH	pH Units	Grab	Weekly
EC	micro umhos/cm	Grab	"
BOD ⁵	mg/l	8-hr. composite	Quarterly (Mar, June, Sept, Dec)
COD	mg/l	8-hr. composite	" " " "

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Sampling Frequency</u>
TDS	mg/l	8-hr. composite	Semi-annually (June & Dec.)
Sodium	mg/l	8-hr. composite	" "
Chloride	mg/l	8-hr. composite	" "
Total Non-Filtrable Residue (Suspended Solids)	mg/l	8-hr. composite	" "
Total Phosphorous	mg/l	8-hr. composite	" "
Total Kjeldahl Nitrogen (as N)	mg/l	Grab	" "
Nitrate Nitrogen (as N)	mg/l	8-hr. composite	" "
Nitrite Nitrogen (as N)	mg/l	8-hr. composite	" "
Sulfate	mg/l	8-hr. composite	" "

Ground Water Monitoring

Ground water monitoring wells shall be established at locations shown on Attachment "B." Representative samples of the ground water in each well shall be collected after purging standing water from the well and analyzing it as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Sampling Frequency</u>
pH	pH Units	Grab	Quarterly (Mar. June, Sept, Dec.)
EC	umhos/cm	Grab	" " " "
COD	mg/l	Grab	" " " "
TDS	mg/l	Grab	" " " "
Sodium	mg/l	Grab	" " " "
Chloride	mg/l	Grab	" " " "
Nitrate (as N)	mg/l	Grab	" " " "

Wastewater Equalization Pond and
Irrigation Area Monitoring

Discharger shall make daily inspections of the wastewater system. During inspections, notes shall be kept on compliance with all applicable Discharge Specifications B.4.-B.7., B.10., and B.13. in Order No. 87-138. Copies of the inspection notes shall be forwarded to the Regional Board with the monitoring reports.

Reporting

Quarterly monitoring reports shall be submitted by the 20th day of April, July, October, and January. The first report is due prior to discharge so background ground water quality may be assessed on site.

ORDERED BY

Executive Officer

September 4, 1987

Date