

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 81-17

WASTE DISCHARGE REQUIREMENTS  
FOR  
HOLLY SUGAR CORPORATION GEOTHERMAL WELLS  
South of Brawley - Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region finds, that:

1. Holly Sugar Corporation (hereinafter also referred to as the discharger) P.O. Box 1240, Brawley, CA 92227, submitted a Report of Waste Discharge, dated December 1, 1980.
2. The discharger proposes to discharge geothermal fluid from production testing of a geothermal well into impermeable basins located in the NW 1/4, Section 29, T14S, R14E, SBB&M.
3. The total volume of geothermal fluid discharged to impermeable basins would not exceed 60,000 barrels (2.52 MG).
4. Geothermal fluid discharged into said basins would be reinjected subsurface or removed from the basins and discharged at a solid waste disposal site approved by the Board to receive this waste. The duration of temporary storage of geothermal fluids would not exceed 60 days following completion of testing.
5. Geothermal brines in portions of Imperial County are known to contain certain constituents which are classified as hazardous by the Department of Health Services, Hazardous Materials Management Section. Said hazardous wastes must be discharged at approved Class I or Class II-1 disposal sites.
6. Waste discharge requirements for the discharge of drilling mud, cleanout water and a limited amount of geothermal fluid from the proposed production well and an injection well at this site, are contained in Board Order No. 79-101.
7. The Water Quality Control Plan for the West Colorado River Basin Region was adopted on April 10, 1975. The Basin Plan contains water quality objectives for Imperial Hydrologic Unit.

*Rescinded  
9/17/86  
by 86-66*

8. Beneficial uses to be protected by this Order are as follows:
  - a. Groundwater
    1. Shallow groundwaters at the discharge location are saline and are not beneficially used.
    2. Deep groundwaters are saline and are being investigated for geothermal development.
  - b. New and Alamo River and Imperial Valley Irrigation Drains
    1. Transport of dissolved solids to Salton Sea for agricultural soil salinity control.
    2. Freshwater replenishment for Salton Sea.
    3. Freshwater habitat for fish and wildlife.
    4. Recreation - nonwater contact.
9. Imperial County Planning Department adopted on October 31, 1979, Environmental Impact Report No. 229-79 for these wells. This report indicates that this project would not have a significant adverse effect on water quality.
10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
11. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, Holly Sugar Corporation shall comply with the following:

A. Discharge Specifications

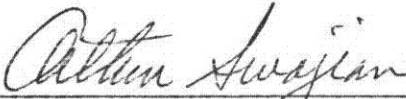
1. Neither the treatment nor the discharge of wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. Geothermal fluids and other wastes shall not enter any rivers, canals, drainage channels, or drains (including subsurface drainage systems) which could provide flow or seepage to Salton Sea.
3. Temporary discharge and/or storage of flow test geothermal fluid other than into containment basins or other containers having a lining permeability of  $1 \times 10^{-8}$  cm/sec, or less, is prohibited, and the fluids contained within shall not penetrate through the lining during the containment period.

4. Adequate protective works and maintenance shall be provided to assure that containment basins will not become eroded or otherwise damaged during the project period, and/or until all flow test materials are removed.
5. A minimum freeboard of at least two feet shall be maintained in each containment basin.
6. Permanent disposal of any waste is prohibited at the well site.
7. Residual wastes contained in basins shall be removed and discharged by subsurface injection or at an approved Class I or Class II-1 disposal site by not later than 60 days following completion of the flow test, or not later than July 1, 1981, whichever is earlier.
8. Fluids discharged by subsurface injection shall not be discharged into any subsurface zone which has a total dissolved solids concentration of less than 10,000 mg/l, unless the total dissolved solids contained in the injection water is less than or equal to that of the receiving water.

B. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 81-17" and future revisions thereto, as specified by the Executive Officer.
2. At least 5 days prior to the discharge of any geothermal fluids into a containment basin, the discharger shall submit to the Regional Board a technical report showing the construction of said basin, and a certificate signed by a California Registered Civil Engineer stating that the basin and attendant facilities are constructed to meet the requirements of this Order.

I, Arthur Swajian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on January 28, 1981.

  
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Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 81-17  
FOR  
HOLLY SUGAR CORPORATION GEOTHERMAL WELLS  
South of Brawley - Imperial County

Location: Section 29, T14S, R14E, SBB&M

MONITORING

Holly Sugar Corporation shall report monitoring data to the Regional Board in accordance with the following schedule:

<u>Constituents</u>	<u>Units</u>	<u>Reporting Frequency</u>
1. Volume of geothermal wastes discharged to containment basins.	Gallons	Monthly
2. Volume contained in basins.	Gallons	Monthly
3. Total dissolved solids content of waste fluid contained in basins.	mg/l	Monthly
4. At least 5 days prior to the discharge of any geothermal fluids into a containment basin, the discharger shall submit to the Regional Board a technical report on the construction of said basin, and a certificate signed by a California Registered Civil Engineer stating that the basin and attendant facilities are constructed to meet the requirements contained in Board Order No. 81-17.		
5. Immediate reporting of any accidental spillage or release of waste material, and plan for immediate measures being taken to correct same and to limit detrimental effects.		
6. Report of completion of removal of all geothermal fluids from containment basins - reported within one week following completion of work.		
7. At least 10 days prior to destruction of a containment basin, the discharger shall request a Regional Board staff inspection and approval of the cleanup procedure.		

REPORTING

The above monitoring program shall be implemented immediately. If activity has not occurred, a report so stating should be submitted monthly.

Monthly reports shall be submitted to the Regional Board by the 15th day of the following month. Reports for Item 5 (above) shall be forwarded immediately, and if at all possible, shall be preceded by phone communication to the Regional Board's office (714) 346-7491. Copies of the reports submitted to the Board pursuant to this Monitoring and Reporting Program, shall be maintained at the operations site, and shall also be made available to the staff of the Regional Board upon request.

Mail reports to:

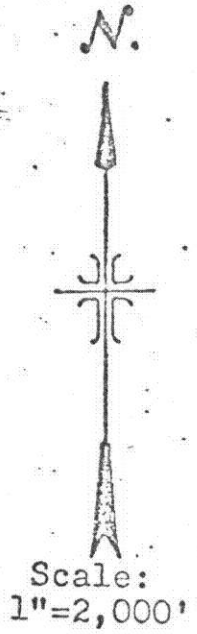
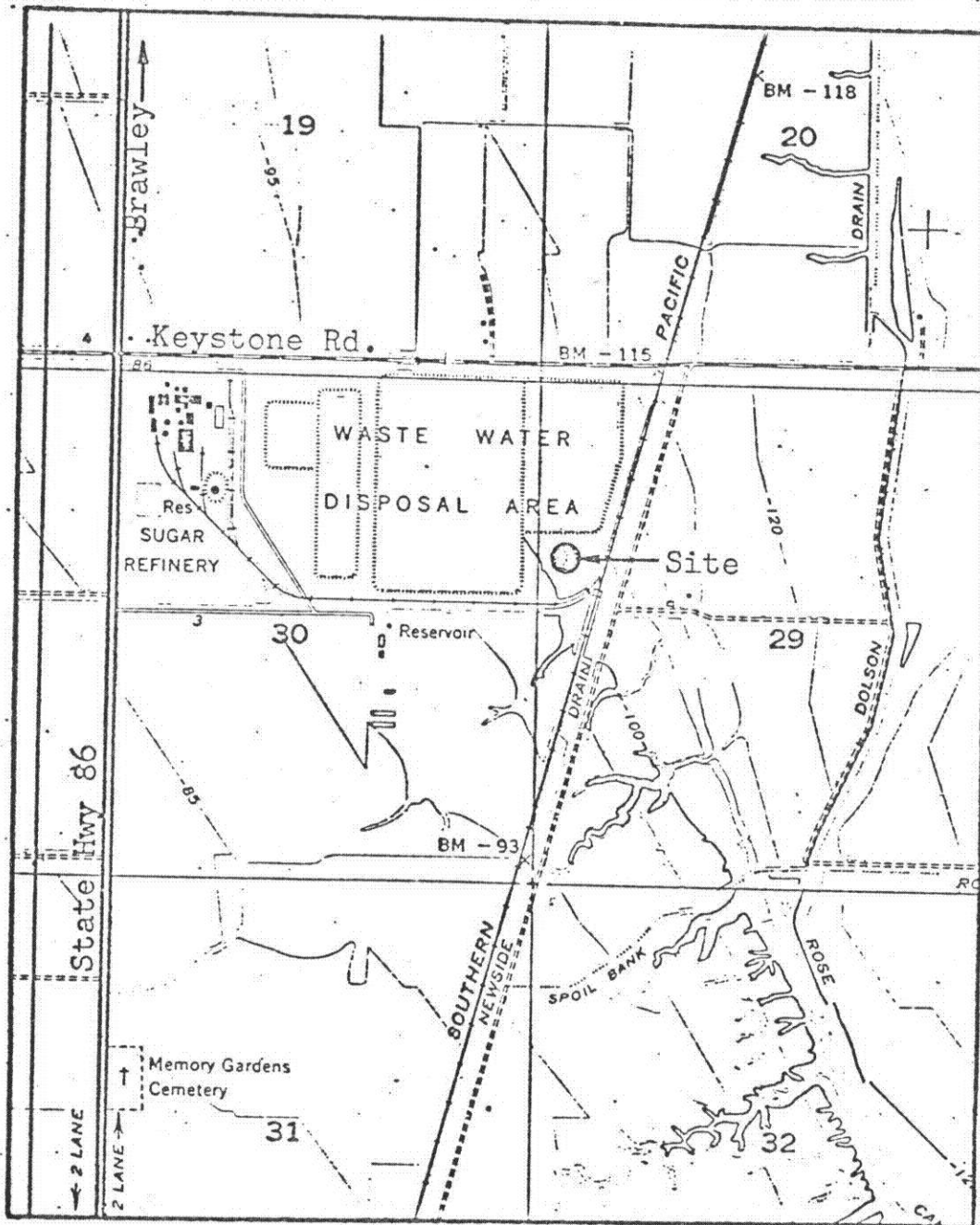
California Regional Water Quality Control Board  
Colorado River Basin Region  
73-271 Highway 111, Suite 21  
Palm Desert, CA 92260

ORDERED BY

Arthur Swajan  
Executive Officer

January 28, 1981

Date



SITE MAP  
HOLLY SUGAR GEOTHERMAL WELLS  
South of Brawley - Imperial County  
Section 29, T14S, R14E, SBB&M  
USGS Brawley 7.5 min. Topographic Map