STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of Rice Road Land Reclamation Company for Review of Order No. 80-017 of the California Regional Water Quality Control Board, Central Valley Region. Our File No. A-262.	Order No. WQ 80-16

BY THE BOARD:

Rice Road Land Reclamation Company, Inc. (Petitioner) operates a solid waste disposal site about one mile North of the City of Fresno, California. The disposal site is approximately 700 yards east of the San Joaquin River and is formerly the site of a sand extraction operation.

The discharge of wastes to this site has been regulated by the Central Valley Regional Water Quality Control Board since the adoption of waste discharge requirements in 1969 (Resolution No. 70-89). This Resolution contained several provisions to protect the groundwater underlying the site. The 1969 requirements of the Regional Board were upheld by us in Order No. WQ 79-7.

Thereafter Petitioner filed a report for revised waste discharge requirements with the Regional Board. On January 25, 1980, the Regional Board adopted Order No. 80-017, revised waste discharge requirements. Petitioner seeks review of this Order.

I. BACKGROUND

The basic issue raised by the Petitioner relates to how much intervening soil there should be between the bottom of the disposal site and the underlying groundwater. The following factors are relevant to this issue:

- Usable groundwater underlies the site. Beneficial uses include domestic, industrial and agricultural. The historical high elevation

of this groundwater was about 274 feet above sea level. In 1978 the elevation of the groundwater was 261 feet above sea level.[1]

- The soils in the area are a Hanford sandy loam, underlain with loose gravel and cobblestones. This soil is highly permeable.

- The 1969 waste discharge requirements prohibited the discharge of Group 2 wastes below an elevation of 285 feet above sea level.

- The Water Quality Control Plan for the Tulare Lake Basin contains the following provision:

> Unsaturated solids or material between the bottom of a Class II solid waste disposal site and the maximum elevation of the water table that may be expected (or as it may be reasonably controlled) should meet the following criteria:

Minimum Depth to Groundwater (feet)	Permeability (cm/sec)
15	10^{-4}
5-15	10^{-8} to 10^{-4}
< 5	10^{-8} to 10^{-10}

- The revised waste discharge requirements under review today prohibit the discharge of Group 2 wastes below an elevation of 280 feet above sea level. An exception is authorized if Petitioner restricts hydraulic continuity between the site and the underlying groundwater by placement

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1. There was some indication in the record that the historical high elevation of the groundwater may have been as high as 289 feet above sea level. However, the Regional Board did not utilize this figure since it was not believed to be accurate. While the groundwater is presently below the historical high, it appears that the groundwater level may rise and fall based on such factors as rainfall, irrigation pumping demands, and recharge from landscape irrigation and increased use of surface water supplies.

of an artificial barrier on the base and perimeter of the disposal area having a permeability of 1×10^{-6} cm/sec. or less. This provision was based on the Regional Board's conclusion that natural conditions at the site do not afford adequate protection to groundwater from the effects of Group 2 materials placed below elevation 280 feet.

- Petitioner, in its request for revised waste discharge requirements, asked for permission to discharge Group 2 wastes to an elevation of 266 feet above sea level.

II. CONTENTION

Contention. Petitioner contends that the Regional Board's Order is not supported by any evidence and is therefore unreasonable. Specifically, Petitioner states that there is no evidence that the underlying groundwater is impacted by the waste discharged to the site and that the margin of safety required by the Regional Board is unreasonable.

Findings. Petitioner's contentions are without merit for the following reasons:

- The Regional Board Order is consistent with the Water Quality Control Plan provisions referenced earlier in this Order. Water Code Section 13263 provides that waste discharge requirements "...shall implement relevant water quality control plans...".

- By regulation we have adopted a system for classifying disposal sites. Sites for the disposal of solid or liquid waste are divided into three classes based on the degree of water protection offered. Only certain

groups of wastes are appropriate for disposal in each class of site, unless a specific waiver is given. For example, Group 2 wastes can ordinarily be disposed of only in Class I or Class II disposal sites. Where, as here, there is continuity between the site and usable groundwater, there must be geological or hydraulic features to assure groundwater protection. Where soil type or artificial barriers do not provide such assurances, adequate depth to groundwater must be present (23 California Administrative Code, Section 2511).

- Petitioner suggests that a Regional Board must have evidence of water quality impacts before adopting waste discharge requirements. We reject this suggestion since it is clear from the legislative intent of the Porter-Cologne Water Quality Control Act that the Regional Boards have a duty to establish programs to prevent the degradation of water quality. Leaving aside for the moment the question of whether there is evidence of groundwater degradation in this case, it does not follow that the waste discharge requirements are unreasonable if such evidence is absent. As we stated in Order No. 79-7, Group 2 wastes usually take more than 50 years to stop decomposing and producing leachate. Further, the potential for water quality degradation may persist long after decomposition is completed if leachate must pass through other materials before reaching groundwater. Under such circumstances of potential discharge, a requirement that there be an intervening level of soil between the wastes and the underlying groundwater appears reasonable without regard to evidence of present discharge effects on the underlying groundwater.

- The Regional Board Order is in fact supported by evidence of water quality impacts of the discharge. Contrary to Petitioner's assertions, our review of the data from the monitoring program discloses such an impact. While drinking water standards are not exceeded, the data shows a two to threefold increase over background levels in the concentration of chemical oxygen demand, solids, hardness, iron, and organic nitrogen. As the Regional Board staff concluded, these constituents are commonly used in the investigation of the effects of solid waste disposal on groundwater and all indicate an impact.

- The Petition includes a contention that the elevation requirement contained in the 1969 Order was based on a mistake in fact. This contention was adequately addressed by us in Order No. 79-7. We affirm the conclusion we reached then: the 285 foot elevation requirement meant exactly what it said. In any event, this 1969 requirement was rescinded at the time the Regional Board adopted Order No. 80-017.

- The Regional Board Order is consistent with a Department of Water Resources recommendation that a physical barrier to restrict percolation be required if any Group 2 wastes are disposed of below elevation 280 feet.

III. CONCLUSIONS

After review of the record and for the reasons herein stated, we conclude that Regional Board Order No. 80-017 is appropriate and proper.

IV. ORDER

IT IS HEREBY ORDERED that the petition in this matter is denied.

DATE: SEP 16 1980

/s/Carla M. Bard
Carla M. Bard, Chairwoman

/s/William J. Miller
William J. Miller, Vice-Chairman

/s/L. L. Mitchell
L. L. Mitchell, Member

/s/Jill B. Dunlap
Jill B. Dunlap, Member

ABSENT
Falih K. Aljibury, Member