

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 86-66

ORDER AMENDING ORDER NOS. 86-15 AND 73-77
WASTE DISCHARGE REQUIREMENTS FOR

THE CITY OF SANTA CLARA
SOLID WASTE DISPOSAL SITE
SANTA CLARA, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. The Regional Board, on December 27, 1973, adopted Order No. 73-77 prescribing waste discharge requirements for the City of Santa Clara (hereinafter called the discharger) Solid Waste Disposal Site, Santa Clara County.
2. The Regional Board, on June 19, 1985, adopted Order No. 85-78 amending Order No. 73-77 to adopt closure requirements for the City of Santa Clara Solid Waste Disposal Site, Santa Clara County.
3. The Regional Board, on March 19, 1986, adopted Order No. 86-15 amending Order No. 73-77 to adopt waste discharge requirements for the City of Santa Clara Solid Waste Disposal Site, Parcel 3/6, Santa Clara County.
4. Findings Nos. 6 and 7 of Order 86-15 state in part that this site does not meet the geologic siting criteria in Section 2530(c) of Title 23, Chapter 3, Subchapter 15, of the California Administrative Code (Subchapter 15), that requires all wastes to be placed a minimum of 5 feet above the highest anticipated elevation of underlying groundwater. The discharger proposes to install a blanket-type leachate collection and removal system as a specific engineered alternative to this prescriptive siting standard. The Board found that the installation of a blanket-type leachate collection and removal system is consistent with the performance goal of the prescriptive standard and would afford equivalent protection against water quality impairment.
5. Specification A.18 of this Board's Order No. 86-15 requires that parcel 3/6 shall be underlain by a blanket-type leachate collection and removal system, to be constructed as described in a report entitled "Leachate Collection and Removal System, City of Santa Clara Sanitary Landfill, Parcel 3/6", dated December, 1985.
6. The report cited in Finding 5 requires that the leachate collection and removal system include a permeable one foot thick blanket-type subdrain layer.
7. The discharger has submitted a letter dated June 13, 1986 proposing an alternative leachate collection and removal system pursuant to Subchapter 15. This letter states that the blanket-type subdrain layer is (1) unreasonable and unnecessarily burdensome and will cost

substantially more than alternatives, and (2) an alternate dendritic leachate collection and removal system is consistent with the performance goal obtained with the blanket system and affords equivalent protection against water quality impairment.

8. The letter cited in Finding 7 describes several alternative blanket systems which offer equivalent performance in terms of preventing leachate buildup. These include (1) a thinner blanket of highly permeable drain rock with a geotextile filter fabric above and below to prevent long-term clogging of the system, and (2) a geonet (synthetic drainage layer) also having a geotextile filter fabric above and below. Cost estimates show no significant savings using these blanket alternatives.
9. In the letter cited in Finding 7 and in a supplemental letter dated July 9, 1986 the discharger proposed a dendritic system designed to provide an equivalent maximum leachate head buildup of 1.84 feet using the same design basis presented for the blanket system. The dendritic system is as described in the letters cited above. Cost for this dendritic leachate collection and removal system was found to be approximately one sixth of the cost for the approved blanket system, while still providing equivalent protection against water quality impairment.
10. The Board finds that (1) the blanket-type leachate collection and removal system is infeasible because it is unreasonable and unnecessarily burdensome and will cost substantially more than alternatives and (2) the proposed dendritic system is consistent with the performance goal obtained with the blanket system and provides equivalent protection against water quality impairment. This finding is based upon the reports cited in the findings above and the requirements of this Order.
11. The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin on July 1, 1982 and this Order implements the water quality objectives stated in that plan.
12. This Order authorizes the filling of Parcel 3/6 of the City of Santa Clara Landfill. The Order governs maintenance of an existing facility and does not have a significant effect on the environment pursuant to Section 21084 (a) of the California Environmental Quality Control Act and Section 15310 of the Resources Code.
13. The Board has notified the discharger and interested agencies and persons of its intent to amend waste discharge requirements, and has provided them with an opportunity to submit their written views and recommendations.
14. The Board heard and considered in a public meeting all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 86-15 and 73-77 be amended as follows:

- A. Prohibition B.4 of Order No. 86-15 is hereby revised to read as follows:
 4. High-moisture-content wastes (those containing less than 50% solids), including water supply and wastewater treatment sludges, shall not be

discharged into the disposal area without prior written approval by the Executive Officer. Such approval shall be granted only if there is adequate moisture holding capacity in the landfill based upon mass balances and previous monitoring of the relevant leachate control facility. A minimum solids-to-liquids ratio of 5:1 by weight must be maintained for the disposal operation overall.

B. Specification A.18 of Order No. 86-15 is hereby revised as follows:

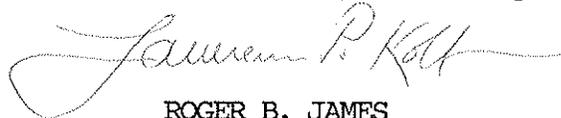
18. Parcel 3/6 shall be underlain by a dendritic leachate collection and removal system as described in the letters cited in Finding 9 of this Order. The dendritic leachate collection and removal system, which incorporates gravel subdrains wrapped in geotextile filter fabric, shall include a minimum 1-foot layer of concrete rubble placed on the base of the landfill between the gravel subdrains and refuse.

C. The following shall be added as Provisions C.16 and C.17 of Order No. 86-15:

16. By January 15 of each year the discharger shall submit a report on the effectiveness of the leachate collection and removal system. The leachate system shall be tested annually pursuant to Section 2543(d) of Subchapter 15. Prior to the testing of the leachate system the discharger shall submit a proposal that outlines how the leachate system will be evaluated. This proposal must be approved of by the Executive Officer before implementation.

17. Prior to placement of waste in Parcel 3/6 the discharger shall submit a report that certifies that the leachate collection and removal system has been constructed according to the design plans cited in Finding 9 of this Order. This report shall be prepared under the direct supervision of, and signed by, a registered civil engineer or certified engineering geologist from the State of California. No wastes shall be placed in Parcel 3/6 until the Executive Officer approves of the report. The Executive Officer shall approve the report only if it clearly demonstrates that the construction has been completed pursuant to the approved design.

I, Roger B. James, 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, San Francisco Bay Region, on August 20, 1986.



ROGER B. JAMES
Executive Officer